Small island tourism economies and the tourism area lifecycle

Why Aruba and Sint Maarten have exceeded their carrying capacity

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Publication date
2020

Document Version
Final published version

SMALL ISLAND TOURISM ECONOMIES AND THE TOURISM AREA LIFECYCLE

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Small Island Tourism Economies and the Tourism Area Lifecycle - Arjen Alberts

Cover Design: https://joemi.myportfolio.com/

Arjen Alberts

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Arend Jan (Arjen) Alberts

SMALL ISLAND TOURISM ECONOMIES AND THE TOURISM AREA LIFECYCLE

Why Aruba and Sint Maarten have exceeded their carrying capacity

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor

aan de Universiteit van Amsterdam

op gezag van de Rector Magnificus

prof. dr. ir. K.I.J. Maex

ten overstaan van een door het College van Promoties ingestelde commissie,

in het openbaar te verdedigen in de Agnietenkapel

op maandag 21 september 2020, te 14.00 uur

door Arend Jan Alberts

geboren te Noordoostpolder

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Acknowledgements

This thesis is the result of experiences, ideas and inspiration accumulated during more than twenty years as a resident, educator and policy advisor on the islands of Aruba and Sint Maarten. There is something very special about these islands and their development, something that rekindled the dormant academic in me and gave me the idea to go on this PhD journey.

This journey might not even have started if I had not knocked at the door of the Research Programme Group Governance and Inclusive Development of the University of Amsterdam in late 2012 to inquire about becoming an external PhD candidate, after an inspired suggestion from my niece Anna Alberts who had just finished her master's thesis there. The pleasant surprise of finding a welcome ear for my ideas stayed with me to this day. A heartfelt word of thanks therefore to my supervisor professor Isa Baud and my co-supervisor Hebe Verrest, who guided me through this process with experience, wisdom and more than a fair share of patience with a PhD candidate who had varying amounts of time to allot to his project. My great appreciation goes out to the other members of my Doctorate Committee; professor Joyeeta Gupta, professor Rosemarijn Höfte, Gerda van Roozendaal and Nicky Pouw. A special word of thanks to professor Godfrey Baldacchino, who not only agreed to sit on the Committee, but has also been a great inspiration for me to venture further into the world of 'island studies', granted me the opportunity to cooperate with him and in doing so has guided my research to the next level.

It is my firm belief that no human activity is as educational as teaching. To the teacher, that is. This is why I want to thank all my former students and colleagues at the different institutions in Aruba and Sint Maarten where I had the privilege to serve as an educator. My years at the University of Aruba, Colegio Arubano, the University of St. Martin, Sint Maarten Academy and St. Dominic High School enriched me, challenged everything I thought I knew, and added texture to my insights about the islands that I could not have otherwise acquired. In the meantime, I hope I conveyed some understanding of economics, accounting and business administration to my students as well.

In Aruba, my appreciation goes to my fellow researchers in the think tank FESCA, presently known as Fundacion Mito Croes. My work carried out in the early 2000s with Mike Eman and Luciano Milliard was a particular inspiration to the PhD project I would start some years later with their continued support and friendship. Over the years, the assistance of Herry Koolman at the Aruban Investment Bank and later at the Aruban Central Bureau of Statistics has been indispensable in providing me with data - and a sounding board. Furthermore, my appreciation goes to the Biblioteca Nacional Aruba for all the assistance I received from them

in tracking down many unique and indispensable documents. Without Luc Alofs, presently of the University of Aruba, his landmark study 'Ken ta Arubiano' and his contribution to the CBS study 'Double or Quits' on Aruban immigration, the idea for this thesis might never even have arisen.

In Sint Maarten, special thanks go to all who assisted me in the Department of Statistics STAT, in particular Joy-Ann van Arneman. My Sint Maarten career and my PhD project would not have remained on track without the trust vested in me by chairman of the APS pension fund Franklyn Richards and the support of my indefatigable legal counsel Cindy Marica.

In the wider Caribbean, I received valuable assistance from the libraries of the Central Bureau of Statistics in Curaçao, the University of Curaçao Moses da Costa Gomes (UoC) and the Mongui Maduro Library. Thanks go to Genève Durham-Phillip, then PhD candidate at the University of the West Indies, for putting me on the trail of 'island studies' and thus steering my research into valuable new directions.

In the Netherlands, several members of the academic community contributed in some shape or form to my thesis. I want to thank professor Gerd Junne of the University of Amsterdam for being an inspiration during my Master's studies and for immediately offering advice many, many years later when I started my PhD plans. Professor Gert Oostindie and Wouter Veenendaal of KITLV Leiden each played an important role by convincing me my Caribbean research mattered.

Across Aruba, Sint Maarten and the U.S. Virgin Islands, a long list of experts from the field of tourism, policy and research have been kind enough to grant me in-depth interviews that have proven invaluable to my research. While a full list is included as an appendix to this thesis, I want to mention two persons whose contributions were of exceptional value; Oscar Henriquez, former Lieutenant-Governor of Aruba and entrepreneur and Robert Dubourcq, manager of multiple hotels and co-founder of the Sint Maarten Hotel and Trade Association SHTA. Both have passed away in the years since the interviews took place, but their insights left an indelible mark on my research.

Finally, and most importantly, I owe deep gratitude to my family. My daughter Hazel and my son Elvin, have always been there along the way to make me realize what really matters in life. They took time out of their own academic pursuits to act as my paranymphs. My wife Monique, who is my anchor in life and partner in all our Caribbean adventures

1. Introduction: what makes Small Island Tourism Economies tick?

Small island development as a field of research has gained considerable attention over the past three decades. This is understandable, as islands each have their unique characteristics, while at the same time offering a microcosm of national development that may provide valuable insights on a larger scale (McCall 1994; Briguglio 1995; Baldacchino 2004). While the field of island studies is dedicated in large part to external influences and threats common to all islands, such as different dimensions of globalization and climate change, islands are agents in their own development trajectory as well, even on a world stage. As it turns out, some islands around the world show remarkable similarities in their strategies of carving out their niche in a globalized world economy and constitute paradigms of island development (Bertram 2006).

The Small Island Tourism Economy (SITE) model is one such paradigm (McElroy and de Albuquerque 1998; McElroy 2006). SITEs are found all over the world, in the Caribbean, the Pacific, the Mediterranean and the Indian Ocean. Like many island studies however, research based on the SITE model is largely oriented towards their macro-level commonalities and similarities in their external relations, in particular to their markets, the countries of origin of their tourist visitors. Tourism product development, -marketing and factors determining (overseas) demand are the most common topics, usually studied from a business management perspective (Croes, Robertico R. 2000; Shareef, Hoti, and McAleer 2008; Ridderstaat and Nijkamp 2013).

The internal dynamics of island development are far less often the object of research, although noteworthy examples exist (Cole 1997; 2007; Cole and Razak 2009; Croes, Robertico R. 2012). Questions as to what internal factors promote, discourage or shape SITE development are much harder to answer.

What makes SITES tick? What are the internal governance and socio-economic processes that help understand how SITEs develop into destinations with a high tourism intensity, and why they react the way they do, when – being small islands - inevitably the limits of their carrying capacity are reached?

In exploring answers to these questions, two SITE cases are researched: Aruba and Sint Maarten. Both former island territories of the Netherlands Antilles, they are now constituent countries of the Kingdom of the Netherlands (hereafter: the Kingdom) (Oostindie and Klinkers 2012). They therefore share a non-independent constitutional status while their legislative framework has common roots and is anchored in the Kingdom Charter.

It is worth mentioning at the outset that both islands have developed along similar lines *in spite of* rather than *by virtue of* belonging to the same governance structure. Their path is fundamentally different from the other four Caribbean islands in the Kingdom, and although sharing some conducive preconditions, the similarities in their SITE development cannot be attributed to common causal factors related to their constituent structure. This circumstance gives added value to this choice of case studies.

Although both are consistently among the islands with the highest tourism intensity according to the SITE definition, research into their SITE development path is scarce, with some studies on Aruba and very few on Sint Maarten. The language barrier in using Dutch language sources may be a factor in this regard. To date, no comprehensive study has been conducted that covers both islands and their very similar development trajectories. It is a goal of this thesis to fill this gap.

Problem statement; SITEs arriving at the end of the lifecycle

The SITEs Aruba and Sint Maarten both struggle with the limits of their carrying capacity (Cole and Razak 2003; TTCI 2004), and are presently considered to have arrived in the stagnation phase of the tourism area lifecycle (TALC) (Butler 1980; Butler 2006a). While answering the question whether their evolutionary trajectory indeed matches the stages of the TALC, the question of *how* this happened from a governance and socio-economic point of view, is addressed. The present situation confronts the SITEs with a multi-dimensional problem. Starting with the heart of the SITE model, the tourism product itself has become dated and weary, leading to less repeat visitors and more challenging competition. Secondly, the volume and scale of tourism has grown tremendously, filling practically all readily available locations. This is part of the now globally recognized phenomenon of over-tourism. A third factor is population pressure. To supply the workforce for this rapidly growing industry, SITE populations have grown proportionally - mainly through immigration. Housing, education, health care, infrastructure and other public services have fallen behind as the SITE development progressed, while the large immigration numbers put a strain on social cohesion in previously tight-knit island communities. The previous factors all contribute to environmental degradation, which in turn feeds back negatively into the tourism product and quality of life on the islands. As a fifth dimension, economic productivity has not increased for at least two decades. Worse still, during the growth stages productivity numbers have been flattered by the addition of immigrant workers to the active population, a situation that is now reversing, causing rapid ageing of the population. This multi-dimensional problem, however, has not led to a revision of SITE model, or even to a halt to volume growth.

SITE economies keep growing by volume. In a state of stagnation and having passed well over the limits of their carrying capacity, this is an acute problem. A slide into the 'decline' stage would be next, which in effect would mean a collapse of the SITE model, as the different problematic dimensions outlined above tend to compound each other. Additionally, the fact that carrying capacity problems exist has in fact been acknowledged and studied since about twenty years by all important parties in terms of the horizontal governance networks; environmental and other civil society organizations, governments and importantly – the tourism industry itself. Nevertheless, no significant action was taken. The reason for this apparent contradiction must lie in the dynamics of the SITE model itself. It is therefore very important to analyze the socio-economic dynamics and governance 'inner workings' of the SITE model, to arrive at an explanation.

Current theory about SITEs mainly focuses on the external characteristics of island development, classifying and comparing SITEs on broad macro-economic and tourism volume indicators. Valuable as this may be, little systematic research is done into the governance choices and internal socio-economic dimensions of the island model. This makes it hard to understand why SITEs have developed as they did, and why they currently seem to make counter-intuitive choices in the face of an ostensibly finite model. Two cases are observed to gain insight into internal factors determining the development path of SITEs. This leads to the main research question:

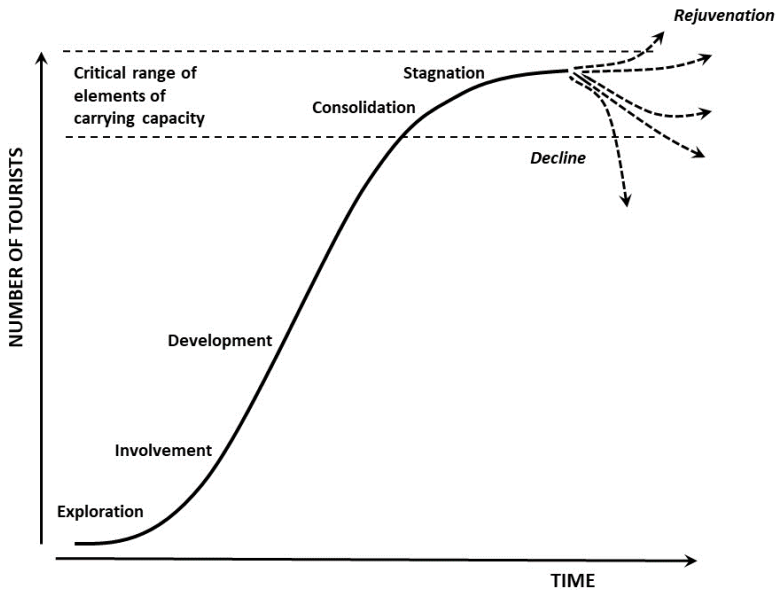
> *How have governance and socio-economic factors contributed to the current unsustainable state of the SITE development model and its resistance to change in Aruba and St. Maarten? How can inclusion of these factors improve the descriptive and explanatory power of the SITE framework?*

Theoretical framework

Tourism Area Life Cycle (TALC) concept

This thesis deals with islands on a dedicated tourism-oriented development path. They are in fact countries as well as tourism destinations in their entirety. It is therefore an obvious choice to view them as such and use the Tourism Area Life Cycle (TALC) theory as a frame of reference for the chronology and content of their development path. TALC is a well-established and much built-upon theoretical framework of the evolution of tourism destinations, introduced and further developed by Richard Butler (Butler 1980; 1996; 2006a; 2010; 2006b). As the author indicates, the roots of the model were in geography (Butler 2006a, p.13), and built on earlier concepts of evolution of tourism areas. TALC proposes the characteristic S-shaped curve, which echoes the shape of the more general product life cycle theory and has become the TALC's trademark.

Figure 1.1. The original 'Tourism Area Cycle of Evolution' concept



Source: (Butler 1980, p. 7)

At the core of the TALC model are the five stages that lead to the top of the S-curve; exploration, involvement, development, consolidation and stagnation. The latter two stages, however, bring a tourism destination to the limits of its carrying capacity. Sustainability of tourism development, in the environmental sense as well as in the broader sense of ability to maintain socio-economic levels, has therefore been an essential part of the TALC framework from the start. The model foresees a range of possible scenarios after the stagnation phase, from reinventing the tourism product to achieve 'rejuvenation' on the positive side, to a negative spiral of product weariness and carrying capacity limitations leading to 'decline'. From its inception, TALC is a cautionary tale regarding the limits of carrying capacity in tourism destinations, as well as offering a way out that implies an active governance model of public-private partnership (Butler 1980, p. 9). The carrying capacity message however, although theoretically widely adopted, has not led to effective actions in practice at a national governance level, according to the author of the model (Butler 1996). In the course of this thesis, the TALC will be continuously used as a frame of reference, and the implicit question whether the development of the two islands indeed follow the TALC stages, is addressed as well.

Small island development paradigms and the Small Island Tourism Economy (SITE) concept

The 1992 UNCED conference linked environmental sustainability and development for the first time as the theme of a dedicated UN conference. Within this context, islands were quickly recognized as a group that merits separate attention, which led to the Barbados plan of action (United Nations 1994) and its successors. This in turn gave rise to a body of literature on the topic of sustainable tourism on islands (Briguglio, Archer et al. 1996; Briguglio, Butler et al. 1996). This cemented the status of sustainability as a crucial concern, a topic that was in essence recognized earlier as central to the TALC model. However, most literature on sustainable tourism in islands focuses on adapting tourism products and strategies on islands, without explaining the dynamics of how unsustainable tourism develops or why it persists.

From the early 1990s onwards, McElroy and De Albuquerque, building on a simplified version of the TALC blueprint, started ranking tourism islands based on the 'Tourism Penetration Index', a benchmark composed of three different tourism intensity indicators (1998). This framework eventually evolved into the Small Island Tourism Economy (SITE) model proposed by McElroy (2006). As with Butler's life cycle model, the concern about the 'mature' stages of development and the limits of carrying capacity are a main element of the SITE model since its inception. In an early example of SITE studies against a TALC background, a 1992 article on Sint Maarten/St. Martin and Bermuda, considers Sint Maarten - perhaps prematurely - to be in the stagnation phase and on the threshold of decline (de Albuquerque and McElroy 1992a, p.15). Clearly, the SITE concept is a template fitting Aruba and Sint Maarten very well, although SITE studies are usually limited to high-level observations of tourism numbers and other macro indicators, seldom looking at the internal factors driving SITE development.

The SITE model is in turn member of a small family of 'island development' paradigms. Previous studies into Pacific, Caribbean and other islands resulted in the MIRAB model, for islands relying on migration, remittances, aid and bureaucracy, first described by Bertram and Watters (1985; 1986). Other islands seem to fall into the 'PROFIT' category proposed by Baldacchino (2006a; 2006b), driven by local jurisdictional autonomy in the fields of 'people, resource management, overseas engagement, finance, and transportation'. The SITE model so far mainly offers confirmation that different islands in this group indeed fit the various phases of the tourism life cycle and thus express similar characteristics. However, questions as to *how* and *why* islands follow this trajectory, and what determines their 'success' or 'failure' in doing so, have so far been addressed only sparingly. These are the questions this thesis seeks to address.

The Vulnerability and Resilience debate

An extensive academic debate exists about the impact of shocks on developing countries, and in particular on islands. The key distinction is between vulnerability, the extent to which an external shock affects an entity, and resilience, the capacity to absorb a shock and to 'bounce back' and transform (Briguglio 2004; Briguglio et al. 2009; Philpot, Gray, and Stead 2015). Generally, export concentration in a small range of products ("monoculture") is considered to generate vulnerability. The question whether this rule applies to tourism islands is one of the topics of this thesis.

SITEs are examples of extreme - yet intelligently executed - specialization, a strategy is described in island literature with the term 'speciation' – borrowed from evolutionary biology by Bertram and Poirine (2007) and further elaborated by Baldacchino and Bertram (2009). Speciation combines overall concentration on one product with a high degree of internal flexibility and adaptivity to changing circumstances. The question whether speciation – thus far described as an island strategy in general terms - should be recognized as an important characteristic of SITEs is addressed in this thesis.

Furthermore, an important recent development in the tourism-vulnerability debate is the distinction between shocks and stressors (Calgaro, Lloyd, and Dominey-Howes 2014). The concept of 'stressors' refers to slow-moving long-term detrimental factors that affect a society over time, which covers the factors caused by exceeding the limits of carrying capacity, thus linking back to the situation of SITEs in the latter stages of the TALC model. In this thesis, the relevance of stressors to the SITE model is investigated.

Occupational strategies and labor market segmentation

Attempts to find explanatory factors of resilience in labor market and migration mechanisms are scarce. In the case of SITEs, with their heavy reliance on immigrant labor, there is reason for investigation in that direction. In doing so, a link was made to the concept of 'occupational multiplicity' introduced by Comitas (1963) based on research into labor market strategies in Jamaica. Flexibility in terms of hours worked, concurrent jobs in unrelated occupations, acceptance of under- or overemployment as well as flexibility in migration decisions are factors that may well be lending socio-economic resilience to SITEs.

This thesis uses 'labor market segmentation' theory as an avenue to help explain the specific socio-economic structure of SITEs. This concept describes a situation in which groups in the lower strata of the labor market are limited in their access to the higher levels on grounds other than skills and qualifications, for instance based on contractual status (permanent/temporary), on belonging to the formal or informal economy, or on personal characteristics such as gender or

immigration status (ILO 2020). This phenomenon is originally described pertaining to industrial societies. In its modern form it has its roots in the 1960s studies of Peter Doeringer and Michael Piore on the US labor market (Doeringer and Piore 1970) that led to the landmark study of Piore and Sabel (1984). In the European context, the research by Loveridge and Mok was groundbreaking (1979). Labor market segmentation is of particular relevance to immigration dependent, high-intensity economies and therefore its applicability to SITEs is analyzed in this thesis.

The idea to apply labor market segmentation to SITEs is inspired by the seminal study 'Double or Quits' published by the Aruban Central Bureau of Statistics in 2004, in which some fundamental questions are explored about the economic sectors immigrants come to work in, and equally important, which sectors locals preferred and moved into (CBS Aruba 2004).

Governance theory

In addressing questions related to the governance of SITEs, this thesis draws on the school of thought of which Torfing is an important representative (Torfing and others 2013). Furthermore, the island development paradigms mentioned earlier (MIRAB, PROFIT, SITE) each imply a certain set of governance choices and strategies. A significant body of literature is dedicated to island governance choices, often in relation to vulnerability and resilience (Baldacchino 2010), or to achieving sustainable tourism (Briguglio, Archer et al. 1996; Briguglio, Butler et al. 1996). SITEs participate in both vertical as well as horizontal governance networks. The vertical governance network of the Dutch islands, including the SITEs Aruba and Sint Maarten, in particular their constitutional relations within the Kingdom of the Netherlands have been studied extensively, sometimes in comparison to other non-independent jurisdictions (Clegg and Pantojas-García 2009; Oostindie and Klinkers 2003; Oostindie 2006). The horizontal internal workings of governance in the Dutch SITEs, however, have been the subject of far less academic research, with the notable exception of Haan (1998) where it concerns institutions and 'rent seeking' and recently Roitman and Veenendaal on the topics of small-island political processes (Veenendaal 2013; Roitman and Veenendaal 2016; Veenendaal 2016).

Research Approach and methodological choices

To answer the issues raise, a number of specific research questions were raised, starting with the main social and economic dynamics, which the islands have experienced. Full dedication to the tourism industry and a close relation between tourism growth, economic growth and immigration are the most immediately apparent characteristics of the SITE model. However, do the factors that at first promote rapid growth and low vulnerability, play the same role in the later stages

of the tourism life cycle? This leads to the first sub-question, which is addressed in chapter 2:

> *What are the main socio-economic dimensions of the extreme SITE model present in Aruba and Sint Maarten? What do these dimensions mean for the vulnerability and resilience of the model?*

The debate on vulnerability and resilience plays a main role in development studies in general, and has special relevance to islands, as they are inherently burdened with factors like remoteness, connectivity and issues of small geographic scale. To explain the particular nature of SITE vulnerability and resilience, most studies focus on tourism demand dimensions and their fluctuations. However, this might not be sufficient to understand the ability of SITEs to withstand shocks or to bounce back after shocks. Factors in the social and economic structure of SITEs, particularly in the labor market, may contribute to resilience as well. Furthermore, the relative lack of vulnerability of SITEs contradicts the conventional wisdom that diversification is a necessary condition to withstand external economic shocks. Finally, where the debate until recently was focused on short-term shocks, recent research broadens the issues to long-term stressors, opening a different view on SITE vulnerability. On these topics, internal mechanisms characteristic of SITEs could explain their particular vulnerability/resilience makeup. This leads to the second sub-question, elaborated in chapter 3:

> *How can its low vulnerability and high socio-economic resilience be explained on macro and micro levels? What role do individual labor market strategies play? When it comes to vulnerability of the model, is there a distinction between shocks and stressors?*

If we ask ourselves what choices were made in SITEs that led to their specific development path, we need to look at the governance framework they operate in. This is particularly true of the question why, in the stagnation stage, there is a lack of purposeful policy action to address the carrying capacity problems and to avoid the risk of sliding into a decline stage. The SITEs in question find themselves in a rather unique context of vertical and horizontal governance networks, which all play a role in their particular SITE trajectory and their results. This leads to the third sub-question, which is the subject of chapter 4:

> *How did the governance framework of Aruba and Sint Maarten influence the SITE development of each island, analyzed in phases following Butler's TALC concept? In particular: When and how did governments and other actors acknowledge the islands' limits to their carrying capacity, and how did they react to this?*

The issues raised above together set the stage for the final issue raised in this thesis. If indeed these high-intensity SITEs have developed along similar lines into the present stagnation stage, given certain socio-economic and governance characteristics and dynamics, do they help to explain why the SITE model has a tendency to keep growing, instead of governments heeding the warnings given by the evident carrying capacity problems? I will show that SITEs not only exceed their carrying capacity limits, but also no longer show any increase in productivity. This – broadly carried – realization in the islands started around the turn of the 21st century. In spite of this however, no significant measures have been taken to change the SITE trajectory, and volume growth continues. This constitutes a paradox; an apparent contradiction between the knowledge of an unsustainable trajectory and the lack of action to change its course. If an apparently untenable situation persists, it is usually in the interest of certain groups or actors who do benefit from the status quo. In first instance, this is hard to see, since the average productivity and income levels have not progressed for decades in the SITEs researched here, taking away an important condition for the generation of benefits to the model. Nevertheless, an explanation to this paradox is sought in the socio-economic structure, more in particular in the labor market-migration junction on these islands. This raises the final issue, put forth in chapter 5:

> *Why does a SITE model that is in a phase of stagnant productivity and lacks average income growth, go unchallenged and unchanged? What explains the perceived 'success' of the model and the reluctance to slow down tourism growth or modify its characteristics?*

Aruba and Sint Maarten form an interesting pair of SITE case studies. Although sharing a common constitutional background and framework, they independently followed comparable tourism island development paths, reaching very similar outcomes. Situated at opposite ends of the Caribbean basin, their development was highly divergent from the other four Dutch islands, and received passive resistance rather than encouragement from the Netherlands Antilles level. Therefore, without any degree of policy coordination or other common causal factors, the two case studies show remarkable similarities that reinforce the likelihood of the results of this study being relevant to other SITEs, particularly those of a high tourism intensity.

When researching questions of macro-economics and demography, secondary statistical sources are used pertaining to both SITEs, to create time-series that show correlations between variables and similarities and differences between both islands. For the recent decades, this data is mainly obtained from the statistical bureaus of both islands and often further processed and reworked. For the 20th century, data from various written sources is used, as the official sources are sometimes less dependable or comprehensive.

Questions with a historical dimension mostly pertain to the governance aspects of how the SITEs passed through the stages of the TALC. These questions are answered based on information from a mix of government planning and policy documents, various other forms of 'grey literature' supplemented with a series of 36 interviews with contemporary experts and actors. A full list is included in appendix 1. This information is largely qualitative in nature. This is true as well for questions regarding vulnerability and resilience of the two SITEs observed here. Data on several instances of external shocks is derived mainly from contemporary reports and expert interviews.

Labor market segmentation is researched with the aid of the results of labor force surveys and other statistical data in both islands, often further interpreted and processed. As mentioned above, the Aruban study 'Double or Quits' has been a crucial initial source for this line of investigation (CBS Aruba 2004).

More in-depth research is conducted into matters of individual occupational and labor market strategies in SITEs. More than twenty extensive semi-structured interviews were conducted with immigrant- as well as local workers, to gain insight into the complex strategies of combining different jobs and gaining income in the SITE labor market. As the number of interviewees was limited, the resulting information is qualitative and indicative. For the purpose of this thesis, this is sufficient, follow-up research will have to shed light on the quantitative significance of the different findings.

An article addressing the socio-economic aspects in the first subquestion was previously published in International Development Planning Review (Alberts 2016). Socio-economic resilience in SITEs and individual labor market strategies were explored in *Resilience and Tourism in Islands: Insights from the Caribbean* (Alberts and Baldacchino 2017)

2. Immigration-dependent extensive growth in Small Island Tourism Economies: the cases of Aruba and Sint Maarten[1]

Introduction

Aruba and Sint Maarten are two of the six islands in the Caribbean that form part of the Kingdom of the Netherlands. Aruba left the former Netherlands Antilles' constellation first, to attain the status of a separate country within the Kingdom in 1986. Since the dissolution of the Netherlands Antilles on 10 October 2010, Sint Maarten now carries the same autonomous constitutional status as Aruba. The two countries distinguish themselves from the other four Dutch Caribbean territories by their strong and predominant orientation on tourism as the driving force of their economic development strategies, and by their very high levels of immigration. Their common institutional and constitutional framework, combined with their shared and distinct commitment to the tourism industry, justifies viewing the two territories as applying a common development model.

While Aruba and Sint Maarten at first sight constitute successful, fast-growing island economies, this article assesses the merits of their apparent success by investigating some aspects of the quality and sustainability of their model. The central question of this article is to explore to what extent the strategy pursued by Aruba and Sint Maarten has resulted in intensive growth, measured by indicators such as increasing labor productivity and increased contribution to GDP per unit of tourism product. Additionally, the question of whether per capita wealth has increased in real terms is addressed. At the same time, to the extent that the economic growth is achieved by growing volume rather than increased productivity, the obvious island limitations of space and environment have to be taken into account.

Furthermore, given the limitations of the Aruba/Sint Maarten model, some indications are given to answer the question why this specific growth model has been perpetuated for so long. Finally, with reference to the influential article 'The concept of a tourist area cycle of evolution' by Richard Butler (1980), some strategic lines of development are proposed that might evolve the Aruba/Sint Maarten model into a more tenable, qualitative direction.

[1] This chapter was published as Alberts, A. 2016. "Immigration-Dependent Extensive Growth in Small Island Tourism Economies: The Cases of Aruba and Sint Maarten." *International Development Planning Review* 38 (1): 75-93.

Methodology

The development model implemented by Aruba and Sint Maarten is placed in a historical context by investigating whether it is in line with, or dependent upon, the characteristics of 'globalization' that became dominant in the 1980s. Furthermore, the place of the Aruba/Sint Maarten model in the taxonomy of different island development models is assessed by comparing its characteristics with those of the MIRAB, PROFIT and SITE models established in island development literature, and described below. The central question in the island development debate – whether island economies are intrinsically vulnerable or resilient – is addressed for Aruba and Sint Maarten by evaluating the characteristics and experiences of both economies over recent decades. To establish the level of immigration-dependence of the Aruba/ Sint Maarten model, the cumulative net migration is shown in comparison to the natural population increase over the period since the adoption of the high-intensity tourism development.

Based on the premise that both economies are almost exclusively dependent on the tourism industry as the engine of growth, selected tourism volume indicators are set off against the development of real GDP. A rising productivity level would be indicated by a real GDP growth index that exceeds the increase in tourism service volume indicators such as numbers of cruise ship visitors or visitor nights spent. Real per capita GDP of both countries is used as a proxy for labor productivity. The development of real per capita GDP over time is measured for Aruba as well as Sint Maarten to provide an answer to the question of which direction labor productivity has developed. At the same time, real per capita GDP can be used as an indicator for average income and provides an indicative answer to the question of whether average wealth has increased over the period under review. The limitations of GDP as a measure of development or even economic growth, as pointed out in the 2009 report by the 'Sarkozy-commission' (Stiglitz, J. E., Sen, and Fitoussi 2009), are acknowledged here. It is important to recognize that growth of real per capita GDP is probably a necessary, but certainly not a sufficient condition for increase in well-being. Conversely, however, under conditions of stagnant or declining real per capita GDP, it is theoretically possible, but highly unlikely that general well-being would have increased.

Aruba and Sint Maarten catching the wave of tourism globalization

Aruba as a tourism destination developed gradually and modestly during the 1960s and 1970s, while the oil industry still constituted the main economic pillar. When the introduction of cheap jet transportation opened the Caribbean for mass tourism from the US, tourism was recognized as an alternative source of economic activity in Aruba (Vanegas and Croes 2003). The attainment on 1 January 1986 of

constitutional separation by Aruba from the Netherlands Antilles, known locally as status aparte, came on the heels of the final closure of the Lago refinery. The demise of the oil industry made the GDP collapse, losing over a quarter of production. However, a sharp tourism-driven reversal caused the GDP to overtake the previous high as early as 1988 with Afl. 1,130 million, continuing double-digit real growth in the next two years (Haan 1998, p.91).[2]

Through a crash program of hotel construction, actively and purposefully aided by government stimuli, as Vanegas and Croes put it, in addition to improving infrastructure 'the government provided direct support through hotel loan guarantees to assist private investors, tax holidays and other fiscal incentives' (Vanegas and Croes 2003, p. 316). Under these conditions, the tourism sector developed rapidly during the late 1980s and 1990s, settling into a more moderate growth rate around the turn of the century. Of the two countries, Sint Maarten relies more heavily on day visitors brought in by cruise ships. The start of tourism-driven economic development on Sint Maarten took place earlier and initially somewhat more gradually than on Aruba. Sint Maarten's economy during the oil industry boom of Curaçao and Aruba between 1930 and 1970 had been the mirror image of the larger Dutch islands'; many Sintmaarteners migrated to Curaçao and especially Aruba to find employment. They typically transferred part of their earnings to their relatives back home, giving rise to the branding of their home island as a 'postwisseleconomie' (money order economy) (Hartog 1964, p. 567). Total population reached a low point of around 1,500 persons in 1951 (Johnson, W. 1987, p. 47).

The stability offered by the Netherlands Antilles and later on Aruba separately, as part of the Dutch Kingdom, attracted foreign investments in hotels and other services. Foreign direct investment, initially subsidized by tax holidays and financial government guarantees, created hotels built or operated by US hotel chains, themselves increasingly globalizing to the specifications expected by the American tourist.

In that era, the hospitality industry started looking for overseas relocation possibilities in the same manner. Aruba and Sint Maarten tapped into this trend, and both became concentrated pockets of high-intensity tourism facilities, guided by knowhow mainly embedded in the franchises of foreign hotel chains. Aruba and Sint Maarten from the onset developed their tourism industry relying on immigrant labor from nearby islands and from the South American mainland. The engagement of foreign labor was initially seen as rotating, seasonal, or both. However, in effect, both islands created their own permanent sub-regional

[2] Note that the official currency used in Aruba up to and including 1985 was the Antillean Guilder (Naf.). As of 1 January 1986, with the attainment of the status aparte, the Aruban florin (Afl.) was introduced as the sole official currency. Both currencies were and are pegged to the US dollar at an equal rate of 1.79 to 1 US$ for the entire period under review in this article.

division of labor, to the extent that this labor supply mechanism became an integral and indispensable attribute of their development strategy.

MIRAB, PROFIT, or SITE? Two islands in the taxonomy of small island development models

Aruba and Sint Maarten, as Small Island Developing States (SIDS),[3] are not alone in their development of strategies that cope with their 'islandness' and that search out opportunities available in a globalizing world. In the era of globalization, a number of distinct island development models have been recognized in the literature. Small island models focus on the specific and unique circumstances of small island economies as determinants of their development possibilities. Therefore the MIRAB, PROFIT and SITE models described below do not so much describe alternatives or counterpoints to globalization, but indicate locally applied consistent strategies by small island jurisdictions in successfully carving out niches in the global economy.

The taxonomy of island development models took off in the 1980s with the description of a strategy adopted by a number of Pacific island territories. Bertram and Watters (1985) define the 'Migration, Remittances, Aid and Bureaucracy' model or MIRAB. The strategy of rotating temporary emigration that gives rise to a steady stream of remittances as an important source of income in the home island is also recognizable as the mainstay of Sint Maarten's development between 1930 and 1970. Nowadays, Aruba and Sint Maarten are on the receiving end of migration from MIRAB-classified Caribbean islands like Haiti and Dominica. The aid and bureaucracy aspects of the MIRAB model are also highly relevant in the context of the (former) Netherlands Antilles as a high level of Dutch aid co-existed with an inefficient two-layered government apparatus (Haan 1998). Presently, however, the MIRAB model is of limited relevance to Aruba or Sint Maarten.

A different distinguishable class of island development is proposed by Baldacchino, with islands exploiting certain economic niches based on a strategic toolset, consisting of a purposely managed (in)migration policy (People); leveraging control over natural resources such as oil, fishing rights or strategic location (Resource management); carving out a high degree of autonomy while remaining part of a larger national entity (Overseas engagement); a distinctive regime in the field of banking and insurance, with a related favorable tax regime (Finance); and powers over air and sea links (Transportation). This island

[3] The concept of Small Island Developing States as a distinct category of countries sharing common environmental and developmental issues goes back to the 1992 United Nation Conference on Environment and Development (UNCED), which subsequently lead to the Barbados Programme of Action in 1994 (United Nations, 1994).

development model, or syndrome in the words of Baldacchino, spells PROFIT (Baldacchino 2006b, p. 48).

The PROFIT model suggested by Baldacchino and Milne (2000), and described earlier, is certainly relevant to Aruba and Sint Maarten. Specifically the straddling of the fence by the Netherlands Antilles and its successors, consistently striving for a maximum level of autonomy, while steadfastly remaining within the Kingdom and rejecting any suggestion of independence, is a recognizable PROFIT attribute. The constitutional link to the Netherlands remains an integral part of the investment climate as well as the 'bridging' role the Dutch dependencies nowadays envision between the Caribbean and Latin America on the one hand and Europe on the other. Being overshadowed by tourism as the main pillar of development, neither Aruba's nor Sint Maarten's offshore financial sector have been able to prosper in the new era of weeding out doubtful financial practices, most clearly represented by the Financial Action Task Force (FATF) established in 1989.

Somewhat surprisingly, the SITE model came to the scene relatively late (McElroy 2006) although it is based on work from the 1990s which introduced the idea of the 'Tourism Penetration Index' (TPI) as a measure of the dominance of tourism in an island economy (McElroy and de Albuquerque 1998, p. 151). The SITE model, originally mainly applied to Caribbean cases, is predated by an earlier tourism-focused variety of the Pacific MIRAB model, postulated in 1996 as 'TOURAB' (Guthunz and von Krosigk 1996, p. 18). Useful efforts at delineating definitions and classifying and categorizing different islands are found in Bertram (2006), Baldacchino (2006b), Oberst and McElroy (2007), McSorley and McElroy (2007) and Baldacchino and Bertram (2009). Of all small island models, the SITE category is the most relevant to Aruba and Sint Maarten. As a measure of SITE-ness, the TPI is used by combining and adapting existing tourism-intensity indicators. McElroy and Hamma (2010, p. 40)[4] show that St Maarten (0.935) and Aruba (0.525) occupy the first and third positions respectively in terms of TPI, 'outperforming' Caribbean tourism frontrunners such as Bermuda, the Cayman Islands and the US Virgin Islands, based on 2006 values.

[4] See McElroy and Hamma (2010) p. 40 for a full ranking of SITE's according to the tourism penetration index (TPI) in 2001 and 2006. Tourism penetration index is calculated as the unweighted average of three indices of numerical indicators: 1) tourist spending per year per resident 2) year average tourist density per 1,000 residents 3) the number of rooms per km2. Each index is calculated as (indicator value – inimum)/(maximum-minimum). Hence, the highest index value, as well as the highest TPI value is the one closest approaching the value of 1.

Table 2.1. Selected 2006 tourism statistics and density indicators for Aruba and Sint Maarten

	Aruba	Sint Maarten
Land area (km^2)	193	34
Population	103,000	30,000
Tourists (stay-over visitors)	694,000	486,000
Day visitors (cruise passengers)	591,000	1,438,000
Average stay (nights)	7.9	5
Room capacity	9,062	3,532
Tourist spending per year (US$ mln.)	1,076	652
Spending per resident (US$)	10,447	21,733
Tourists per 1,000 residents (avg/ year)	162	345
Rooms per km^2	47.0	103.9

Source: (McElroy and Hamma 2010, p. 40) adapted. [5]

As the figures show (Table 2.1), Sint Maarten leans more heavily towards cruise tourism, while Aruba's focus is on the hotel and timeshare industry. In Sint Maarten, the stay over sector developed rapidly at first but met with the obvious space constraints of its 34 km^2 surface area compared to Aruba's 179 km^2. In 1997, stay over versus cruise visitor proportion was 65:35 for Aruba against 40:60 for Sint Maarten, (Island Government Sint Maarten 1997, p. 15). In 2007 the proportions had diverged even more; the Aruban ratio stabilized at 62:38, while that of Sint Maarten developed to 25:75.

Aruba as well as Sint Maarten fall squarely into the SITE category, with some recognizable PROFIT attributes. Baldacchino and Bertram (2009, p. 152) even place Aruba in the PROFIT/SITE overlap, probably by virtue of its (dwindling) offshore financial and trade sector. The SITE model however offers few analytical tools in terms of recognizing motives and instruments of strategic choices made by island states. In the cases of Aruba and Sint Maarten, it is worthwhile investigating how and why the SITE model was followed so successfully, what the ensuing bottlenecks are, and what possible avenues for improvement might exist.

[5] McElroy and Hamma (2010) mention a surface area for Sint Maarten of 54 km^2. This is possibly the result of a mix-up with the French side of the island. Reality for the Dutch side is even smaller: 34 km^2. Correcting for this error elevates the room density as well, from the value of 65.4 calculated by McElroy and Hamma to 103.9 as mentioned here.

Aruba and Sint Maarten: vulnerable or resilient island economies?

This section further analyses the Aruba and Sint Maarten model in terms of the main factors of production; labor, capital and technology, taking into account the institutional framework in which they operate. Starting like Sint Maarten with no significant indigenous production sectors and being almost depopulated, or in the case of Aruba, with a recently collapsed oil industry, there was hardly a question of tourism driving out other types of employment or industry. The risk of a 'Dutch disease' situation with one dominant sector crowding out existing alternative economic sectors did not materialize on these islands. Bertram and Poirine (2007, p. 330) argue, therefore, that in this sense 'Dutch disease' is treated by the islands as an evolutionary opportunity rather than a threat.

Labor supply plays an unconventional role at the macro-economic level in Aruba and Sint Maarten, being in effect highly adaptable to national economic development. Each phase of expansion by (foreign) direct investment in the tourism industry has been matched by an increase in labor supply through immigration. Moreover, some immigrant labor supply is temporary, so labor supply can even be modified to match short-run cyclical or seasonal changes in demand (CBS Aruba 2002, p.68-70; CBS Aruba 2004, p. 34). In general, however, according to a comparative study into immigration into Caribbean micro-states including Sint Maarten 'there is nothing more permanent than temporary workers' and policy objectives to keep large portions of immigrant labor supply continuously rotating are bound to fail (ECLAC 1998, p. 4).

Contrary to many open-economy developing countries, especially around the time of the take-off of Aruba's and Sint Maarten tourism bonanza, the two island economies cannot be readily qualified as 'resource-based'. Resource-based economies suffer certain economic development issues not because of the provenance of their product, but rather because of where their product is located in the production chain. In contrast to exporters of products like minerals, oil and agricultural raw materials, Aruba and Sint Maarten deliver a service directly to end users in the global North or in one of the emerging economies. The classic issues of declining barter terms of trade, vulnerability to changes in production techniques, and other downstream dependencies do not apply.

In the present debate on island development economics, the 'vulnerability' thesis is under fire. The concept of smallness and remoteness being intrinsically connected to economic vulnerability has been rejected as empirically unsound. In fact, following the definition of 'vulnerability' it turns out that islands with higher vulnerability indicators also have higher per capita GDPs (Baldacchino 2006a, p. 862; Bertram and Poirine 2007, p. 329; Baldacchino and Bertram 2009, p. 142). As in many cases, small island economies are doing remarkably well; hence, in spite of or even by virtue of their islandness, an alternative 'resilience' paradigm is

proposed, supported by the concept of 'strategic flexibility' (Baldacchino and Bertram 2009, p. 141). Baldacchino and Bertram argue that it is the capability to quickly adapt to changing opportunities in the globalized marketplace that makes an island economy resilient. Success in this respect is promoted by multi-functionality, not with the aim of concurrent diversification – which would be prohibited by diseconomies of scale – but with the goal of being able to quickly switch from one branch or variety of production or service to the other.

Certain institutional factors promote resilience. For instance it appears that many non-sovereign island jurisdictions fare better than those that gained independence (Baldacchino 2006a, p. 853), a circumstance of special relevance to Aruba and Sint Maarten with their continued ties to the Dutch Kingdom.

For the type of hyper-specialization that stems from the absence of economies of scale and the ensuing non-feasibility of risk-spreading through diversification, Bertram and Poirine coined the term 'speciation':

> *"Speciation refers to the sort of specialization in which an entire community takes advantage of a niche of evolutionary opportunity by adopting a particular economic 'personality' with its own distinctive set of institutions, policy imperatives, and mutual understandings amongst the participating population."* (Bertram and Poirine 2007, p. 327)

The resilience of these one-pillar economies to external shocks has been illustrated convincingly over the past decade. Shocks like the impact of the 9/11 terrorist attacks on global aviation, the 2005 Natalee Holloway disappearance in Aruba, or the 2008 global financial crisis have affected both economies measurably, but none of these incidents have had a profound or lasting impact. This is mainly due to rapid and extensive reactive marketing efforts from the governments and private sectors alike.

In terms of factors of production, some bottlenecks in the model can be readily predicted. Most obviously, the natural resources in terms of available coastline on both islands are intrinsically limited, and the trend to fill each length of ocean front with tourist accommodation is visible, with the logical consequence of increasing high-rise construction. More indirectly, the surging population fills both islands at the cost of natural surroundings and places both territories at the top of the list of population density in the Caribbean.

Aruba and Sint Maarten as regional migration nodes

Given the intertwined nature of Aruba and Sint Maarten and their neighboring states and territories in terms of migration, it is useful to see their development model as a regional rather than a national one. Intra-Caribbean migration as such

is hardly new; labor demand-driven migration between the islands has occurred in the region for centuries, with peaks in demand ranging from the seasonal demand of the sugar cane industry to projects like the construction of the Panama Canal. The trend we see nowadays is more structural however. The movement from being a net exporter of labor to a net importer in the Caribbean is described by McElroy and Albuquerque (1988, p. 30) as a 'migration transition'.

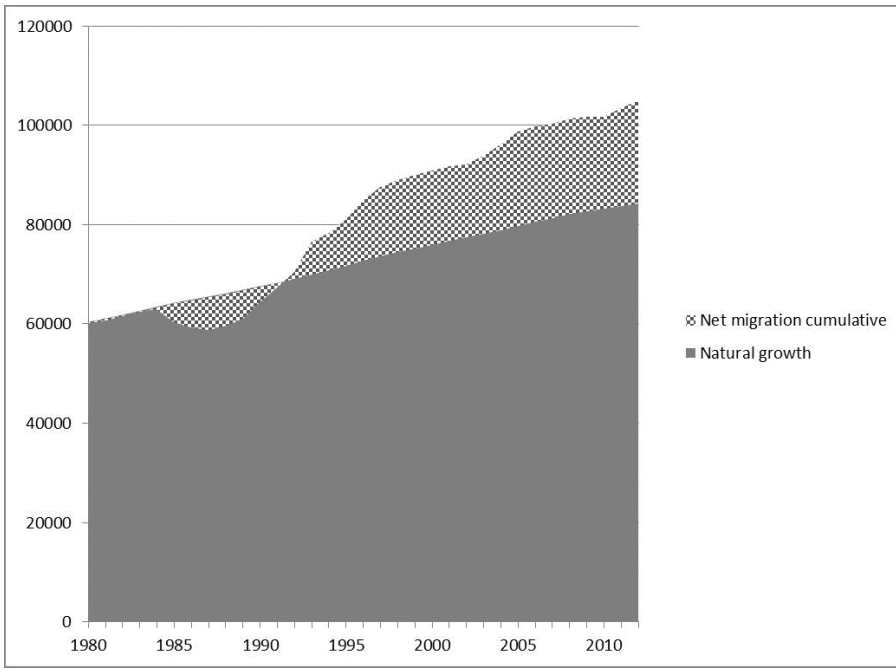
Current structural migration movements have probably changed the Aruban and Sint Maarten societies irreversibly. The extent of tourism development in Aruba as well as in Sint Maarten almost immediately outgrew the supply on the local labor markets. This is remarkable in the Aruban case, as their tourism development was initially intended to compensate for the loss of jobs following the closing of the Lago refinery. Figure 2.1 clearly shows the population dip following the 1985 closing of the refinery followed by the rapid take-off of the late 1980s and the consistent population growth thereafter. As a point of reference, the cumulative net migration from 1980 onwards is shown in the same graph, making it clear that some 24,000 of the more than 40,000 population growth after 1980 may be attributed to structural immigration.

Although the new hotel industry absorbed a great number of local workers, new immigrant labor was employed from the start, hailing from the Latin American mainland and the larger Caribbean islands. The vast majority of new positions was filled by immigrants. According to CBS Aruba (2004, p. 85), over the period 1991–2000:

> *"the new jobs created by Aruba's growing economy were increasingly filled by foreign workers; [… A]pproximately 12,700 jobs were added to the labour force. Natives represented only a small share of this labour market growth: 10.8 per cent" (out of a total growth of 43.4 per cent over this 10-year period, ed.).*

The rest of the growth (32.6 per cent) can be attributed to new immigrants. As the Sint Maarten tourism industry took off somewhat earlier, the demographic transition took place sooner as well. According to Johnson (1987, p. 103), it started as early as 1980: *'The uncontrolled growth of the island has led to a massive influx of workers, the majority of whom come from other Caribbean islands'*. According to Haan (1998, p. 87), in 1981 40 per cent of the Sint Maarten population was born on the island, 20 per cent in other islands of the Netherlands Antilles, and 40 per cent were immigrants, mainly from the surrounding region.

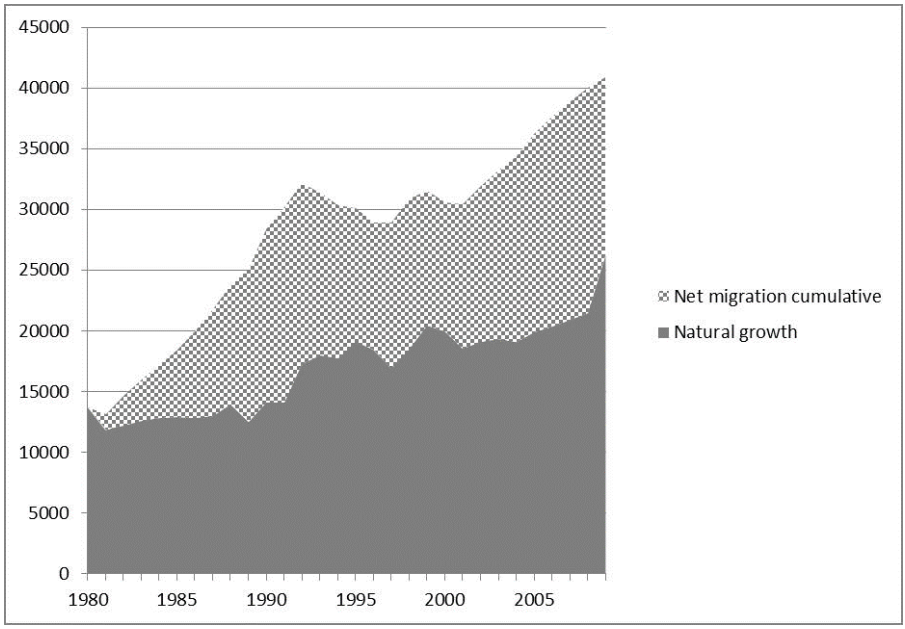
Figure 2.1. Aruba: population and cumulative net migration 1980-2012



Source: Data supplied by Central Bureau of Statistics Aruba

From being close to depopulated during and after the Second World War, the economic development associated with tourism brought Sintmaarteners back from the dwindling oil industries of Aruba and Curaçao and attracted numerous immigrants from the wider Caribbean. Figure 2.2 shows the extremely high contribution of immigration to Sint Maarten population growth in the tourism-dominated era. Clearly visible as well are the effects on population numbers of the devastation and economic downturn caused by hurricanes Luis in 1995 and Lenny in 1999. More than in the case of Aruba, however, official population statistics pertaining to Sint Maarten should be handled with caution. According to Haan (1998, p. 87), as early as 1995 the number of undocumented residents was estimated at more than 10–12,000, an estimate consistently mentioned in the years since. In 1995 this constituted roughly 25 per cent of the actual population.

Figure 2.2. Sint Maarten: population and cumulative net migration 1981-2009



Sources: STAT Sint Maarten, CBS Curaçao, CBS Netherlands Antilles[6]

As well as directly tourism-related employment, there has also been a large growth in the construction sector. In the case of Aruba, indigenous workers on balance actually moved out of the hotel sector and into other areas of occupation. CBS Aruba (2004, p. 87) reports that in 2000, about 60 per cent of all persons born in developing countries were either working in the sector's hotels and restaurants, wholesale and retail trade, repair or construction. The distribution of foreigners from developing countries in Aruba over the different industries displays only slight changes between 1991 and 2000. In the same period, employment of persons born in Aruba increased strongly in the highest categories (senior administrators, managers, professionals) and actually shrank in the lower categories. Clearly, the indigenous population moved into the positions of higher pay and responsibility, while the labor market was resupplied at the base with immigrant labor. Data of comparable quality on the Sint Maarten situation is not

[6] Source: STAT Sint Maarten/CBS Curaçao/CBS Netherlands Antilles. It should be noted that the volatility of
the natural growth line in the population statistics is mainly due to frequent retroactive corrections of (previously estimated) population statistics over the years, upon the availability of population census results. Although the year-to-year consistency of the historic data is poor, a long-term trend can be discerned.

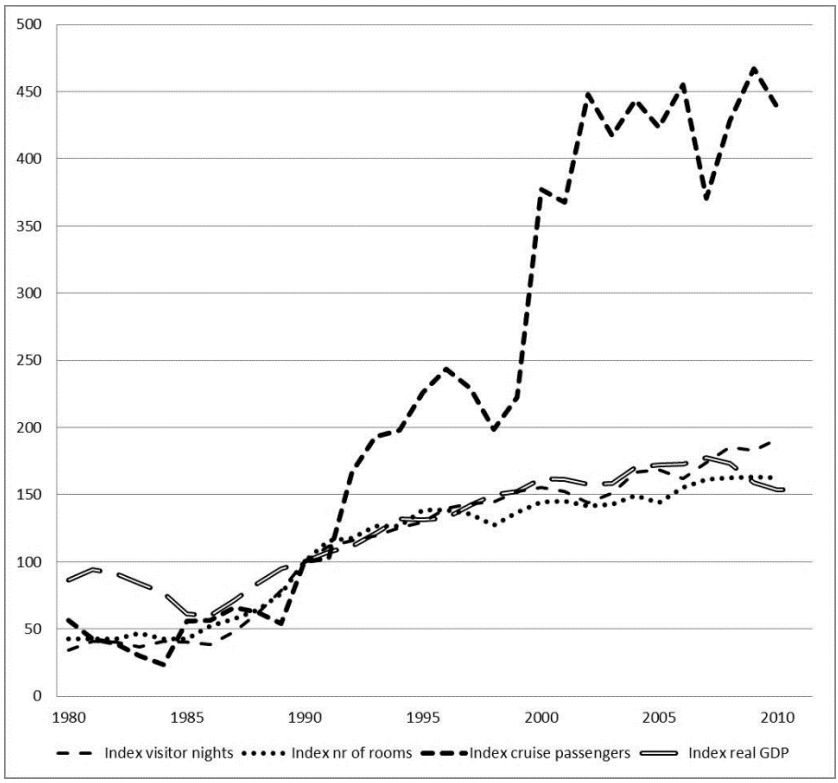
readily available, but there is an over-representation of those with Dutch citizenship in civil service and in better-paid positions in the private sector.

Aruba and Sint Maarten: rapid extensive growth in an island setting

At first glance, Aruba as well as Sint Maarten is a shining example of successful, fast economic growth based on a commitment to the tourism industry, as is apparent from GDP numbers, the TPI index and the SITE classification, as discussed above. This section will focus on a number of questions regarding labor productivity and average income. Did the volume growth in tourism activities result in an equal or perhaps higher growth in real GDP in either country? Allowing for population growth, did real per capita GDP show any significant increase in Aruba or Sint Maarten since the onset of large-scale tourism? After all, with the development of the tourism industry over the years, we would expect labor productivity to have grown as well. A certain evolution in the type and nature of hospitality products offered, economies of scale, increased linkages, and positive improvements in infrastructure might all have contributed to a higher value added per worker indicated by a rising real per capita GDP.

However, immigrant workers are typically not immediately accompanied by their families, and even less by retirees. This effect increases the proportion of the economically active to the total population, which in turn leads to an overstatement of productivity when measured through real per capita GDP. In other words, under circumstances of steady immigration of economically active persons, with actual labor productivity assumed constant, we should see a steadily increasing real per capita GDP.

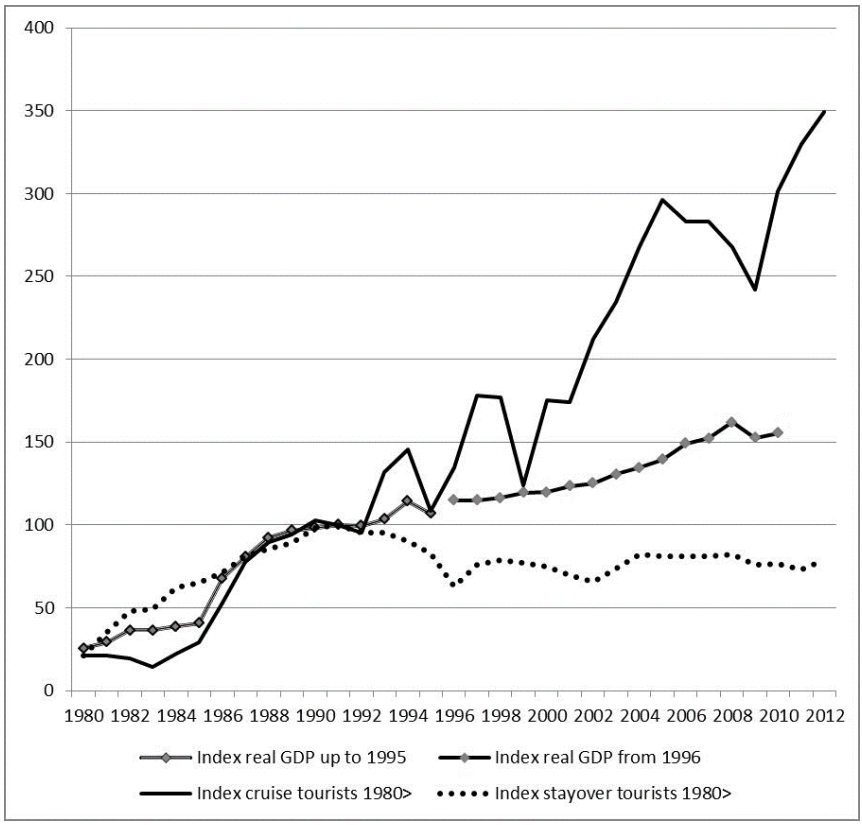
Figure 2.3. Aruba: indices of selected tourism indicators and real GDP (1990=100)



Source: CBS Aruba, indices calculated by author, base year 1990

Figure 2.3 shows that in Aruba, since the firm establishment of the tourism sector in its present form in 1990, volume has grown more than 60 per cent in terms of stay over capacity and almost doubled in visitor nights. Real GDP however, is only just keeping up with the number of rooms and visitor nights. Taking into account the contribution of cruise tourism growth and the absence of significant other economic sectors, these indicators point to a stagnant or even decreasing impact of tourism volume on economic growth, where an increase in value added per unit of volume would have pointed to increasing product quality and labor productivity.

Figure 2.4. Sint Maarten selected tourism indictors and real GDP indices (1991=100)



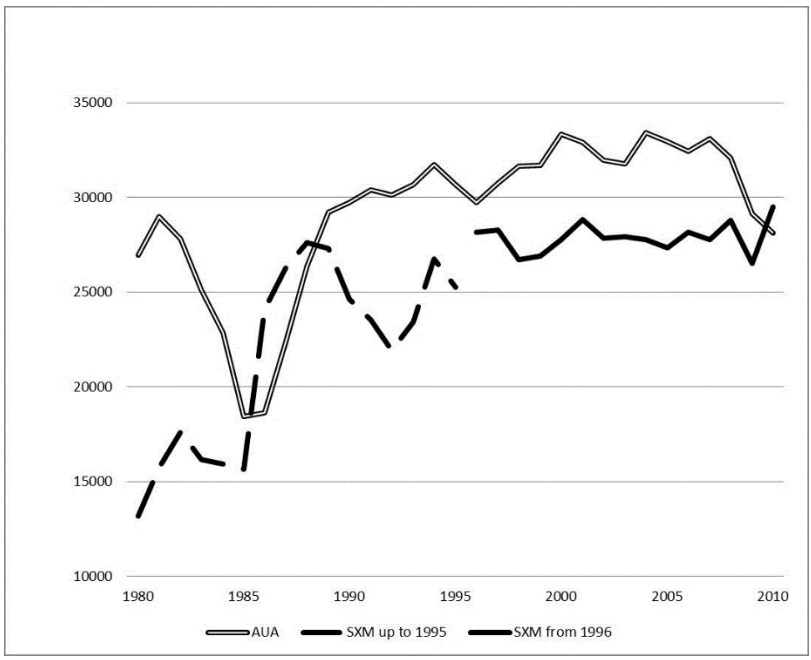
Sources: Haan (1998), CBS Netherlands Antilles, STAT Sint Maarten, Harbour Group of Companies (Sint Maarten), Tourism department (Sint Maarten), indices calculated, base year 1991.[7]

Figure 2.4 shows that cruise tourism has become an even more dominant source of activity in Sint Maarten over the past decades. Over the same period, the number of stay over visitors declined, though stabilized after the mid-1990s hurricane disaster. The cruise tourism line clearly shows the effects of the 1995 and 1999 hurricanes as well. Cruise tourism stagnated again after 2005 and was further hit by the 2008 financial crisis. Economic recovery and expansion of harbor facilities brought a renewed growth until the present day. The available macro-economic model for Sint Maarten indicates that the (direct) contributions of total stay over tourism and cruise tourism to GDP are 56%–44% in favor of the former.

[7] Sources: GDP 1980–1990: Haan 1998, GDP 1991–1995 CBS Netherlands Antilles; GDP 1996–2010 STAT Sint Maarten; CPI: STAT Sint Maarten; Cruise tourists: 1980–1990 Statistical yearbooks CBS Netherlands Antilles, 1991 onwards Harbour Group of Companies, Sint Maarten; Stay over tourists: 1980–1984 Statistical yearbooks CBS Netherlands Antilles, 1985 onwards tourism department Sint Maarten.

Based on this, a 20 per cent drop in stay over tourism combined with a 250 per cent rise in cruise tourists compared to 1991 levels should have resulted in a real GDP growth of more than the roughly 60 per cent now recorded. Therefore, as in the case of Aruba, there is a lack of translation of tourism volume growth into real GDP increase, and therefore a lack of productivity growth.

Figure 2.5. Real per capita GDP Aruba and Sint Maarten, 1980-2010 (US$; CPI 1996=100)



Sources: CBS Aruba, Haan 1998, CBS Netherlands Antilles, STAT Sint Maarten, all CPI indices calculated at base year 1996.[8]

In Figure 2.5, for both islands, real per capita GDP is chosen as an indicator for labor productivity. The Aruban development clearly shows the crash associated with the closure of the Lago in 1985, and the subsequent rapid recovery. After 1990 the gain in real per capita GDP levels off, not structurally increasing again until the present day.

The Sint Maarten curve in Figure 2.5 clearly shows an initial gain in productivity similar to Aruba associated with the tourism boom of the 1980s, again levelling off as soon as the tourism sector becomes fully dominant in the economy. As we

[8] The Sint Maarten GDP measurement underwent a methodological change between 1995 and 1996; hence the graph is shown interrupted. Sources: Aruba: CBS Aruba, Sint Maarten: GDP 1980–1990: Haan 1998; GDP 1991–1995 CBS Netherlands Antilles; GDP 1996–2010 STAT Sint Maarten; population; STAT Sint Maarten; CPI: STAT Sint Maarten.

have seen earlier, in both cases further development does increase the volume of tourism as well as the volume of the labor force, partly through immigration. However, the quality of economic activity in terms of productivity remains unchanged. As stated above, this effect is compounded when taking into account that the proportion of economically active persons to the total population actually increased through immigration, as immigrants mostly fall into economically active age groups.

When real per capita GDP is used as a measure of average income, the conclusion is similar. The trend is not rising despite the rapid growth of total GDP. The usual reservations brought forward when using real per capita GDP as an income measure only make matters worse. To name one important factor; in a situation with heavy foreign investment, part of profits and interest comprised in GDP will flow overseas resulting in a GNI (Gross National Income) smaller than the GDP. Assuming the part of value added flowing to foreign recipients is more or less constant, this would not change the horizontal direction of the per capita GDP trend, rather it would just shift it to a lower level.

Perspectives: stagnation or evolution?

Considering the combined effect of the immigration-dependent, extensive economic growth trends outlined above with the obvious spatial constraints of both islands, the outlook for Aruba and Sint Maarten seems bleak.

The observation that environmental and physical space (often described in terms of 'carrying capacity') is inevitably running out has been made before; see for instance Cole and Razak (2009, p. 414) pertaining to Aruba, or as early as 2004 in the case of Sint Maarten's carrying capacity study (TTCI 2004). It is obvious even to the casual observer, and unfortunately also to many visitors, that the intensity of the tourism industry and the increasing population density negatively affect the tourism product itself and the quality of life in general. The concept of 'carrying capacity' however does not come with many useful operational indicators (Johnson, P. and Thomas 1996, p. 126). Indeed, although theoretically a Caribbean tourist version of Singapore may not be out of the question, the cost of compensating for the negative externalities involved will probably become prohibitive.

The data presented here paint a picture of a rather consistent extensive growth model over several decades, which makes it a very real question why no successful attempt was made in either country to shift economic development towards a more productive, less immigration-dependent and less space-consuming direction. After all, even outside the context of island limitations, warnings about the weariness on the demand side of tourism and the ensuing need for a tourist destination to constantly reinvent itself go back to Butler's tourism life cycle

concept of the 1980s (Butler 1980, p. 7). Using Butler's terms, Aruba and Sint Maarten have been residing in the 'consolidation stage' for decades, and staving off the ensuing 'stagnation stage' will not be successful much longer.

While Aruba and Sint Maarten seem to be good examples of dedicated, full-blown 'speciation' as postulated by Bertram and Poirine (2007, p. 327), both islands seem to lack the real strategic flexibility found in some other islands to effectively take their tourism industry to the next level. The fact that smaller scale, higher value added tourism development is in fact possible in the Caribbean is shown by examples like Anguilla, in the direction of high-end luxury tourism, or by Dominica, in the direction of eco-tourism. Neither Aruba nor Sint Maarten, therefore, entirely fulfils the niche-oriented potential shown by some other island developing nations in the PROFIT or SITE categories.

As the current extensive growth model has persisted for so long, the assumption is justified that this model must be in the interest of the major stakeholders, or is at least perceived by them to be so. A full exploration of these interests is outside the scope of this article, but the data at hand provides us with a few pointers. Externally, foreign investors in a certain category of the tourism industry evidently still consider Aruba as well as Sint Maarten attractive investment locations offering a known and consistent investment climate with stable demand factors. Internally, however, governments in both islands have not been successful in more selectively attracting a different class of investments. Lip service has been paid to such upgrading objectives since the 1990s, but few results have been visible. This may indicate shortcomings in the execution of policy, a lack of political urgency or even the absence of a real interest in change.

Certain characteristics of the labor market in both countries offer clues on interests perpetuating the current model as well. As immigrant labor has been continually added, mostly at the bottom of the social pyramid, those who have Dutch citizenship have increasingly moved into mid-level and higher positions in the private sector, and certainly claimed most positions in the government apparatus (CBS Aruba 2004, p. 87). As a consequence, while overall average real per capita GDP and income may have been stagnant, this is most probably not true for the average income of the pre-immigration population of both islands. The extent of the socio-economic 'moving up' of the original population and its effects on the perseverance of the current development model is one of the most interesting questions arising from the available data. In this context, the phenomenon of 'rent-seeking' behavior by organizations and individuals, as described for the Netherlands Antilles by Haan (1998), also merits further research.

The direction in which perspectives for a more sustainable evolution of Aruba and Sint Maarten are to be found are largely implied in the shortcomings of the

current model. As an overall approach, the in itself defensible course of 'speciation' needs to be complemented with the right amount of strategic flexibility. Within the tourism sector, new niches with higher value added need to be sought out, while the bulk of the current hospitality industry needs to shrink in quantity and grow in quality. Premium trends in tourism demand need to be sought out and catered to more effectively. Recent attention to the positive impact of business tourism on development is an example of such an approach (Rogerson 2014). Such initiatives would take Aruba and Sint Maarten back on the track of 'resilience'. Achievement of these objectives will take strategic efforts in close public-private cooperation, affecting all factors of production and the institutional framework in which they operate.

To this end, a different kind of investor has to be attracted; one that brings a technologically more advanced 'production process' indicated, for instance, by higher levels of value added per room and per employee. This should be feasible in itself; both islands constitute known and proven markets and investment locations, and there is no *a priori* reason why the investment climate would not support a more productive class of investment. Even if most of the tourism knowhow implemented comes embedded in foreign direct investments, this is by no means a necessity. With the level of experience developed in Aruba and Sint Maarten over the past decade, the homegrown portion of their tourism industry should certainly be able to expand.

Regardless of the source of capital invested, the key to success will be in the levels of education and skills of the workforce complementary to the new formulas implemented, and in the physical and institutional 'infrastructure' offered by governments. Higher and more effective education of the existing workforce will be necessary to operate more advanced (luxurious, varied, specialized) hospitality formulas. Furthermore, a more luxurious class of hotels, condominiums or timeshare developments can only prosper in upgraded surroundings as well. This ranges from better roads to a cleaner environment, less crowding and different types of adjoining leisure activities.

As to human resources, alternative solutions will greatly impact the quality and quantity of the labor market. Given the islands' circumstances, a more intensive type of growth necessarily implies substantial investments in the education and improved skill set of workers, at the same time eliminating the need for growth of the total workforce. Eventually, this may halt or reverse the migration trend. This is true for both islands but especially important in Sint Maarten, where population density is the highest in the Caribbean, and adversely affects quality of life and the tourism product.

Conclusions

Aruba and Sint Maarten constitute a specific subset of the SITE category, distinguishable by its exceptional rate of tourism volume expansion as well as immigration, even by the standards of the SITE model itself. Within the vulnerability-resilience debate, the evidence regarding Aruba and Sint Maarten points towards resilience, as even the heavy external shocks of the past decades have not fundamentally weakened their growth paths. Both islands fit the description of the 'speciation' strategy outlined in the island development literature. Population figures of both islands clearly show the very high levels of net immigration in comparison to natural population increase, underscoring the immigration-dependent nature of their development model. This phenomenon is stronger for Sint Maarten than for Aruba. The dependence of both countries' economic development on immigrant labor makes their development a regionally-embedded rather than a 'stand-alone' island model.

Comparison of selected tourism volume indicators to real GDP growth for both islands shows that real GDP growth has not exceeded production volume growth since 1990. Productivity per unit of tourism capacity or yield per unit of tourism service rendered has not increased. The data therefore points clearly towards a model of high-paced extensive growth, combining rising volume with lagging productivity.

An assessment of real per capita GDP development over time yields the same conclusion; after a period of rising real per capita GDP during the initial years of establishment of the tourism industry in its current form, both countries' real per capita GDP levels are no longer increasing, with Aruba settling at a slightly higher level than Sint Maarten. The indicators observed in both countries point to a model of extensive economic growth, i.e. a situation of growth in output volume without an increase in value added or output per unit of production factor.

Combining the fact of extensive growth with the self-evident limited space of both island territories, the Aruba/Sint Maarten model can clearly not be perpetuated in the long term. The future perspective is, therefore, either one of stagnation when the current model hits its physical boundaries, or one of evolution, where a different type of investment, embodying a higher level of technology, is combined with a more highly educated workforce and a more effective government administration, to increase productivity and real per capita GDP in both countries.

3. Resilience and Tourism in Islands: Insights from the Caribbean[9]

Introduction

Resilience is more than the absence or opposite of vulnerability. As a measure of susceptibility, vulnerability is indicative of the extent of exposure: the degree to which a shock or stressor is impacting a society, group or household. Resilience, on the other hand, is coping ability: the degree to which an entity can effectively react to mitigate the effects of a shock or stressor by taking measures or changing its behavior. Each entity can therefore be both vulnerable and resilient simultaneously, to some degree (Briguglio 2004; Briguglio et al. 2009; Philpot, Gray, and Stead 2015).

High degrees of economic openness, export concentration and dependence on strategic imports constitute the main drivers of economic vulnerability in small (mainly island) states and territories (Briguglio 2004, p.44). Small island tourism economies – or SITEs, after (McElroy 2006) – fit this template to a great extent, with a heavy reliance on tourism as the main source of foreign currency, and conversely on the need to import the vast majority of energy, food and industrial products. On the resilience dimension, the question is how successfully a country or jurisdiction is able to cope with adverse circumstances and shocks. This ability relies heavily on adequate government policies and the quality of governance in general. Briguglio (2004, p. 47) proposed indicators for goods, governance, macro-economic stability, market reform policies (meaning the degree of market competition and labor productivity), social cohesion and environmental management to arrive at a set of measurable indicators of 'resilience'.

Looking closer at export concentration as an indicator for intrinsic vulnerability, this seems to be based to a large extent on the experience of countries that rely on the classic monocultures: oil and other minerals (bauxite, phosphate, guano, nickel) and unprocessed agricultural products (coffee, banana, pineapples, sugar, tobacco). These exports suffer from declining terms of trade, vulnerability to technological and lifestyle changes (such as the introduction of substitutes or shifts in dietary habits) and price volatility (as in the current case of oil).

Export concentration in services is incorporated into Briguglio's vulnerability index. However, one wonders whether the same argument for vulnerability stemming from export concentration in primary goods is equally applicable to

[9] This chapter was published as Alberts, A. and G. Baldacchino. 2017. "Resilience and Tourism in Islands: Insights from the Caribbean." In *Tourism and Resilience*, edited by Richard W. Butler, 150-162. Wallingford, UK: CAB International.

tourism service exporters like the SITEs. Tourism, as a finished product marketed to the final consumer based mostly in the global North, is at the opposite end of the production chain from the markets of primary goods that generate the economic volatility and vulnerabilities to which the classic monocultures are subjected. Research suggests a close relationship between tourism performance in the destination markets and income developments in the sales markets, but no long-term deterioration in price levels or in terms of trade. For Aruba, Ridderstaat (2015, p. 252) cites a very favorable 'average terms of trade' index of 1.23 for the period 1986–2004. As to vulnerability, with income elasticities in relation to separate target markets that are significantly larger than one in the short run, it is important to diversify over different countries of origin (Croes, Robertico R. 2000; Croes, Robertico R. 2011; Ridderstaat 2015, p. 65).

This chapter makes the case for the competitive advantage of small island economies as tourism destinations. It argues that the social and economic fabric of small island jurisdictions – which includes a canny disposition towards occupational multiplicity by the local labor force – breeds a form of resilience into which the local tourism economy, in both its formal and informal manifestations, nests comfortably and thus drives local development sustainably. This argument is made with special reference to Caribbean SITEs, and is based both on a select literature scan as well as semi-structured interviews undertaken by one of the co-authors (Arjen Alberts) in spring 2016. The data in this article was gathered in three Caribbean SITEs. Two of these – Aruba and Sint Maarten – are constituent countries of the Kingdom of the Netherlands; Aruba is located in the south-western corner of the Caribbean basin, close to the Venezuelan coast, while Sint Maarten, a jurisdiction that shares an island with the French *collectivité d'outre-mer* of Saint Martin, is situated in the north-eastern arc of the lesser Antilles. The third, the US Virgin Islands, are located to the west of Sint Maarten, close to Puerto Rico. They are an unincorporated territory of the USA.

Vulnerability and Resilience: Shocks and Stressors

Vulnerability[10] is mostly defined in terms of the impact of sudden, time-limited external shocks such as economic disturbances affecting trade, natural disasters or terrorist attacks. Less attention is generally paid to stressors: long-term factors that build up over time to adversely influence a tourist destination's development. This is especially relevant to Caribbean SITEs that are not particularly vulnerable to shocks but, through their islandness and small scale, must all somehow cope with heavier waste generation, infrastructure decay, stronger environmental degradation and other, slow-moving processes. These developments threaten to

[10] In this chapter, the term vulnerability refers to vulnerability of national economies, to be distinguished from other types of vulnerability that are regularly the object of development studies, for instance household vulnerability.

strangle the tourism product once a slow but steady build-up reaches an irreversible tipping point (Westley et al. 2011). In this respect, the concept of a Destination Sustainability Framework (DSF) introduced by Calgaro et al. offers a useful extension to the vulnerability concept by distinguishing between shocks and stressors, thereby further shaping a framework that adapts the dimensions of vulnerability and resilience (i.e. actions taken in response to stressors and shocks) to the realities of tourist destinations (Calgaro, Lloyd, and Dominey-Howes 2014).

Vulnerability, similar to the somewhat archaic term volatility, is a relative concept. To assess the vulnerability generated by a one-sided reliance on tourism, it makes sense to compare SITEs to neighboring countries relying on alternative exports. Croes (Croes, Robertico R. 2006, p. 455) argues that tourism revenues are two to five times less volatile than those secured from the export of material goods, be they unprocessed or manufactured. Indeed, the Caribbean region has outperformed Central and South America in terms of growth and, particularly on the smaller islands, tourism has become by far the dominant economic sector. Tourism is the largest earner of foreign exchange in 16 of the about 30 countries in the region, all of these 16 being island states or territories (Bryan, Anthony T. 2001; Croes, Robertico R. 2006). There is no evidence of tourism rendering tourism- oriented Caribbean economies more vulnerable to external developments than other countries in Central America and the Caribbean, regardless of their degree of diversification. In the cases of Aruba and Sint Maarten, real gross domestic product (GDP) has grown consistently over the past 20 years, with interruptions by such events as 9/11/2001 and the financial crisis of 2008/9 affecting growth, but not to a larger extent than the global impact. Whatever the systemic shortcomings of the Caribbean SITE model may be in terms of lagging real per capita GDP and productivity growth (Alberts 2016), there is no proof of above-normal vulnerability to external shocks.

Several features could explain an intrinsically low-level vulnerability for the tourism industry in the Caribbean, and by extension for the SITEs who are particularly reliant on this type of activity. Most importantly, fluctuations in demand from the target markets do not translate immediately into lower income for the tourism destinations. First of all, many of the accommodations in Aruba, Sint Maarten and the US Virgin Islands consist of timeshare units: Sint Maarten has the largest proportion of timeshares in the Caribbean as a percentage of total capacity. Timeshare owners are remarkably indifferent to fluctuations in their own economy, and even quite impervious to external shocks in general. Even after the catastrophic damage by Hurricane Luis in Sint Maarten in 1995, timeshare owners were the first to return and generate income for the devastated island. The high proportion of timeshare owners is universally credited by stakeholders for preventing a near total economic collapse, and for contributing to a recovery

that was faster than that experienced on the surrounding islands. A timeshare impact study for Sint Maarten, commissioned by the Government of the Netherlands Antilles in 1996, states:

> *"Caribbean owners in 1994 reported that they expect to return . . . twice as often after purchasing timeshare than before. The commitment to return was amply displayed during the period following Luis when it is widely recognized that returning timesharers saved the island from serious economic decline."* (Symonds Travers Morgan 1996, §7.7)

Secondly, true to the perishable nature of the tourism product, hotels typically tend to drop the room price in the face of an inward-shifting demand curve. This will bring down the average room price, but the short-term goal is maximizing total revenue as reflected for instance by the revenue per available room (RevPAR) indicator. Occupancy rates could still drop somewhat, but most of this loss is compensated by price reduction. Modern information communications technology (ICT) and Internet marketing tools make quick fine-tuning of price in the face of changing demand easier than before. Furthermore, once the tourist is on the island, the complementary expenditure by the visitor on items other than lodging will still contribute positively to the economy. Finally, short-term profitability fluctuations do not greatly affect the local economies of SITEs, as most large-scale accommodations are under foreign ownership or management.

For the cruise market, the effect is comparable. Cruise ships aim for maximum occupancy as well and, when ticket prices are lowered, this does not directly affect the economies of the ports of call. The number of passengers may not shrink much, and the damage done by a decrease in demand may be limited. For the receiving islands, it is mainly the potentially lower purchasing power of these 'cheaper' passengers that could reduce the benefit to local economies.

In both the stay-over as well as the cruise ship market, targeted marketing efforts rather than heavy price cuts may also restore occupancy rates. This is because of the substitution effect that takes place in the total tourism and recreation markets. If we look at each market segment in isolation, an economic downturn may cause a Caribbean destination to lose a percentage of its original visitors due to a loss of purchasing power in that market. However, tourists previously belonging to a more affluent market segment who now can no longer afford their more expensive vacation, will opt for a Caribbean island instead, partly restoring occupancy levels even without a price change (Ridderstaat 2015, p. 65). The resilience question is then how to bring this alternative choice to the attention of the down-trading traveler through the right marketing channels. The mid-budget position that the Caribbean occupies vis-à-vis the US market, with more expensive European and Pacific destinations on one side and continental US vacations on the other, is a positive factor in this respect.

The Natalee Holloway affair: a case study of limited vulnerability and active resilience

The disappearance of a young US tourist, Natalee Holloway, on 30 May 2005 on the island of Aruba – a 'country' within the Kingdom of The Netherlands – constituted an incident whose impact on tourism numbers should theoretically be readily discernible in isolation from other factors (Wanzo 2008; Brown 2015). The incident caused a wave of negative publicity in the USA, Aruba's main tourism market, and the source of some 70% of the island's stay-over visitors. As a consequence, visitor numbers from the USA declined from a monthly number that seasonally fluctuates between 35,000 and 55,000 to 30,000–50,000, a pattern that faded out in the 2 years following the disappearance. Despite this being a widely publicized event, there was no measurable change in non-US visitor numbers. Moreover, among tourists from the USA, repeat visitors appeared to be almost unaffected in their decision to travel to Aruba again. The number of new visitors, however, did decline significantly: this shows that, in a situation where the destination choice was being made from scratch, without insider knowledge, the damage to Aruba's reputation was considerable. Interestingly, the effect on first-time visitors lasted exactly as long as the impact (however small) on repeaters, suggesting a close causal relationship between an adverse decision and the level of immediate publicity. Furthermore, the decline of first-time visitors turned out to be concentrated in a well-defined region of the USA – in and around Holloway's home state of Alabama – again suggesting a close relationship to the level of exposure in local news media. Hassink et al. estimate an aggregated loss of between 33,200 and 69,000 stay-over visitors, translating macro-economically into a loss of between 0.5% and 2.1% of GDP in 2005 and a range of 2.5 to 4.0% in 2006 (Hassink, de Kort, and Ridderstaat 2015). Some caution is warranted in interpreting this data, however. Concurrent with the Natalee Holloway incident, a sharp increase in oil prices and therefore travel costs took place. Repeat visitors, often timeshare owners, form a captive audience, and will not be equally influenced by travel costs compared with first-timers, who may postpone their vacation or choose a different destination closer to home, for instance within mainland USA (Ringbeck 2009, p. 44; Ridderstaat 2015, p. 65).

An alternative analysis of statistical data around the Holloway affair by Kock (2010) focuses on the assumed effect on US visitor numbers as compared to Venezuelan and Dutch tourists, the next two largest contingents in the Aruban market. Taken together, these three markets comprise 85% of Aruba's stay-over visitors. Kock finds no significant influence on either of the three visitor number series; in contrast, the terrorist attacks of 11 September 2001 did produce such an effect. Kock also argues that the lack of statistical significance of the Holloway effect on US visitors may be due to a high degree of repeat visitors. A drilling down into distinct tourist segments within the US market – repeat versus first-time

visitors and regional effects in the USA – would reveal the micro-economic character of the impact found by Hassink et al. (2015).

On the vulnerability side of the Natalee Holloway case, it is hard to imagine a more devastating public relations incident on the level of personal safety – a recognized core factor in tourism destination marketing – short of a terrorism-related incident. In this light, it can be argued that the vulnerability of Aruba and arguably other Caribbean SITEs to this kind of incident is, however, limited.

The Natalee Holloway case is not only a story of limited vulnerability, but also of active resilience. There was the intervention by Aruba's Tourism Office in redirecting and adapting marketing efforts; initiatives were quickly put in place to counteract negative publicity in the US media; and a concerted campaign was launched by government, the local private sector and civil society to create an atmosphere of safety and security for visitors present in Aruba. To prevent lower occupancy rates, additional marketing effort was put into the European and Latin American markets by the Tourism Office, while the Aruban government countered negative publicity in the USA about the alleged ineptitude of the local police and judicial system. Publicity campaigns and other initiatives in Aruba were aimed at putting the tourists' minds at ease and displaying empathy for the victim and her family. For instance, all civil servants were given a half day off to participate in search efforts (Luidens-Daryanani 2016).

Mechanisms of Resilience in SITEs: the Macro Level

Economic resilience is mostly defined as the result of sound policy and adequate measures in reacting to adverse external shocks. However, not all resilience is government driven. In the case of heavy external shocks, SITEs in the Caribbean have shown other coping mechanisms. One of the most notable stabilizing forces has been that of in/out and circular migration. As islands with patterns of fast economic growth accompanied by attracting large numbers of foreign workers, the presence of a reservoir of temporary or recent immigrants creates a shock absorber in the labor market and the economy as a whole. These movements are primarily driven by social and economic factors – mainly labor market opportunities in the SITEs that render them more attractive than surrounding islands – rather than by government policies per se. Governments may play a facilitating role by, say, issuing residence permits; but – in the cases of Aruba, Sint Maarten or the US Virgin Islands – governments do not usually actively attract, encourage, dissuade or expel immigrants in response to economic growth, or lack thereof.

In 1986, Aruba was still a budding SITE that experienced the quite unexpected closure of the Exxon-owned Lago refinery (Ridderstaat 2007). Although this event caused a dramatic drop in production and therefore GDP, it was also accompanied

by a massive outflow of workers and their families, most of whom migrated back to their Caribbean islands of origin. This movement was government facilitated rather than government induced: former oil workers were allowed to cash out their state-pension entitlement on the condition of leaving Aruba; but it is plausible to claim that few would have remained even without this incentive. The next phase in Aruba's resurgence was a classic response strategy, however, including: (i) a concerted public– private effort to expand the tourism sector by attracting foreign investors; (ii) creating or revamping the basic infrastructure; and (iii) allowing a fresh wave of immigration to accommodate the demand for labor in the hospitality industry (Eman 2013). In effect, a large part of the labor force and the population was exchanged for a different one, with different skills and from different origins. In the span of a few years, Aruban GDP had surpassed its pre-Lago closure level (Haan 1998, p. 91).

In 1995, Sint Maarten was hit by Hurricane Luis, in what would be the heaviest impact natural disaster in the recorded history of the island (Basco 1995). Having an extreme geographical concentration of hotel rooms, Sint Maarten was indeed vulnerable to this kind of conflagration: local infrastructure, private homes and virtually all hotel and timeshare inventory suffered extensive damage. According to the Tourism Penetration Index, Sint Maarten was at an undisputed number one position in the Caribbean in terms of tourism intensity, and was surpassed in hotel rooms per square kilometer only by the Cayman Islands (McElroy and de Albuquerque 1998, p. 153). Even a full year after the storm, 30% of the island's room capacity was still out of business (SHTA 1996). Among the losses was the entire 600-room flagship Mullet Bay Resort. The acute loss of employment did not lead to chronic unemployment, however. At the base of the social pyramid, many undocumented immigrants were hit twice, losing their job and their often ill-constructed dwelling at the same time. The majority was repatriated, with government assistance, thereby effectively exporting what could have become a social disaster (Begina 2015).

More recently, the closing of the Hovensa refinery on the island of St Croix, US Virgin Islands, in 2012 was another example of the effect of a sudden economic shock being dampened by migration. In this case, some 40% of the workforce, facilitated by their US citizenship, migrated to the continental USA to find new employment in the oil industry there (Joseph 2016; Bryan, Albert 2016).

The cases of Aruba, Sint Maarten and St Croix are examples of migration as an essential element of (not just Caribbean, but global) small island development, be it as a conscious governmental macro strategy or a micro (household) 'security-centered survival algorithm' (Brookfield 1972). The switch of many rapidly modernizing islands from net labor exporters to importers, for instance, has been described as 'migration transition' (McElroy and de Albuquerque 1988, p. 31): 'Migration, as a form of livelihood mobility in response to long-term economic

fluctuations, has become institutionalized in the socio-economic fabric of West Indian island systems'.

Limiting vulnerability and promoting resilience: 'speciation' and strategic flexibility in SITEs

In many small island states and territories, higher vulnerability indicators coincide with higher per capita GDP (Baldacchino 2006b; Bertram and Poirine 2007; Baldacchino and Bertram 2009). Moving beyond the vulnerability debate to the question of resilience strategies, the case for intelligent specialization, and by extension against a one-dimensional identification of resilience with diversification, is made by Bertram and Poirine:

> *"A key requirement for sustainability in a situation of hyper-specialization is flexibility and rapid response capability. Retention of the ability to mutate, or to undertake a rapid shift to a different 'species' in response to shifts in external opportunities, remains a crucial reserve asset in the small island's portfolio of social capital."* (2007, p. 331)

The crux lies in this capacity to adapt or even mutate swiftly in the face of changing outside (regional, global) circumstances: a process labelled 'speciation' with a term borrowed from evolutionary biology (Baldacchino and Bertram 2009). Poon (1990, p. 113) has made such a case for flexibility, segmentation and diagonal integration with regards to tourism development; this was before the advent of the Internet, with its revolutionary impact on destination selection and tourism marketing.

Individual and household strategies make up an important dimension of overall societal resilience of Caribbean SITEs. These social and economic strategies beyond the role of government range from income-generating strategies (that include the number of hours worked, the type of employment or business venture sought and held successively or simultaneously) to the decision to migrate or re-migrate.

The flexibility found at the individual and household level comes in many forms. In a situation of declining employment, seasonal or structural, the availability or frequency of secondary income sources may decrease. A permanent formal job may be lost and traded in for something temporary. The quality of temporary employment or the yield of one's business may decrease. This kind of fluctuation is of course inherent to a seasonal tourism industry, and a certain tolerance for medium-term income flexibility is already there. The possibility to save, invest or transfer money to relatives may likewise shrink. The level of fulfilled aspirations

may be reduced to getting by financially, or even falling back to survival in the local circumstances.

In the case of immigrants, these stages have usually been passed through in the positive direction and can be tolerated under adverse economic circumstances without leading to immediate personal or social crises.

Looking closer at occupational multiplicity

The term occupational multiplicity (or occupational plurality) was coined by anthropologist Lambros Comitas in his work about the practice in rural Jamaican communities of combining farm work with paid labor (Comitas 1963). Non-farming paid labor is typically engaged in when a farming family is confronted with exceptional expenses, when the farming season does not require much work, but also when agricultural income is insufficient, and non-farm income may be sought at the expense of the farm itself. In the cases researched by Comitas, occupational plurality was especially prevalent among men, in a measure increasing with age, from 33% of men between the ages of 15 and 24, up to 88% of men over 40 (Comitas 1963, p. 45).

Patterns of occupational multiplicity have been described throughout the Caribbean, not always as a defensive strategy, but also as an avenue to fulfil certain levels of aspiration. A study of informal sector activities in Martinique shows that emulating the lifestyle of the more affluent is a powerful driver as well (Browne 1995, p. 31).

Occupational multiplicity has been closely connected to the growth path of Caribbean SITEs in different phases. At first, in situations of labor shortage, local workers welcomed the chance to increase their income by working several concurrent jobs in what was often seen as a temporary windfall (Joseph 2016; Richardson, René 2015; Labega 2015). In later stages, however, immigration would generate a more adequate supply in the labor market and occupational multiplicity would extend to newcomers as well, albeit more as a strategy of necessity rather than opportunity.

The labor market effects of tourism development in SITEs are fairly well known(McElroy and de Albuquerque 1988; ECLAC 1998; CBS Aruba 2004; Croes, Rigoberto H. 2007). However, less attention has been given to the employment dynamics of individuals and households. To generate an initial understanding of the nature and extent of occupational multiplicity in Caribbean SITEs, field research has been done in Aruba, Sint Maarten and the US Virgin Islands during spring 2016. A total of 23 structured interviews with persons engaged in several concurrent occupations were conducted by one of the coauthors (Arjen Alberts) in the three territories. Supplementary data was gathered from eight personal interviews with experts in labor relations, economic development and socio-

economic issues on each island. The section below reviews the extent, causes and effects of occupational multiplicity and overemployment in SITEs as documented from this fieldwork exercise.

Hours worked

Persons move into a situation of structural overemployment by combining two or more part-time sources of income, or one full-time job and one part-time occupation, whether as an employee or as a small entrepreneur. Among interviewees, the average number of weekly hours worked in their primary occupation is 38.5, in a range between 20 hours and 70 hours a week including overtime, with half the respondents working the median workweek of 40 hours. The average total hours worked on additional occupations is 21, with a median of 20. Significantly, 21% of respondents combine two jobs of 40 hours each or more.

The division between primary and secondary sources of income overlaps somewhat with the distinction between the formal and informal economy. In the different combination strategies observed, the primary income is most often gained from a formal job, thus providing socioeconomic basics like a residence permit, medical insurance and job security. The second occupation, however, may very well be in the informal sector.

High cost of living

Over half of the respondents in Aruba, Sint Maarten and the US Virgin Islands cited the high cost of living as the primary reason for their situation of overemployment.

Housing prices have risen considerably on the SITEs because of their fast economic growth and limited surface areas. To make matters worse, the hospitality industry and residential development are competing for what is a sharply delineated and limited space, and the alternative utilization of many private dwellings as tourism accommodation – a trend bolstered by the Airbnb phenomenon – puts an additional upward pressure on housing prices. House and apartment rents are therefore high in Aruba, Sint Maarten and the US Virgin Islands. The same goes for buildable lots, which play an important role in the aspirational decisions of occupational multiplicity households.

Where immigrants are concerned, there is a paradox in the high cost of living argument, however. Immigrants, who typically have a lower average household income than locals, would be expected to have factored in the high cost of living when taking the decision to settle in one of the tourism growth poles. The high rents and energy bills notwithstanding, the possibility to earn a higher income than in their country of origin is apparently decisive. It appears from the responses received that, while the prior knowledge of the wage level in the SITEs is fairly

accurate, the level of discretionary income to be gained in Aruba, Sint Maarten or the US Virgin Island is often overestimated by immigrants.

Savings and long-term investment

Long-term savings and/or loan repayments for durables like a car, or for building a house or starting a business, are mentioned by 40% of respondents as a motive for working several jobs. Aside from savings being a motive to work long hours, however, three-quarters of respondents claim to be able to save in some measure, with (down payments on) a car or a house mentioned several times. Local families aim at generating additional income to build a house, usually for the dual purpose of family dwelling and long-term investment.

Children's education

One-third of all respondents mention the cost of children's education or their children's future in general as a reason for being overemployed. It is a motive shared equally among immigrants and locals. This factor weighs heavier in the US Virgin Islands than in the Dutch territories, probably because of the relatively higher tuition costs of tertiary education in the USA than elsewhere.

Transfers to overseas relatives

Transfers of funds to (extended) family members are a prime goal of immigrant workers, and they were mentioned by one-third of immigrant and naturalized respondents. As the motivation for migration was to gain a higher income than would be possible at home, and restrictions apply to accompanying family members, transfers to relatives are a logical consequence.

Problems related to overemployment

Respondents estimate that, out of the women and men they know, around 40% are working more than one job; locals and immigrants are equally disposed. Unsurprisingly, half the workers in a situation of occupational multiplicity indicate problems related to health, fatigue or lack of sleep. Furthermore, 25% indicate insufficient time to dedicate to their families.

Gender differences

Women are less choosy when considering additional or alternative occupations. According to 52% of the respondents, women are likely to quickly accept any available job, while men have the tendency to wait longer until a position more fitting to their skills becomes available. Another 18% indicated that women find jobs more easily or quicker than men, without specifying a cause. None of the interviewees indicated the opposite. Women were perceived by some to have it 'easier to find jobs', but upon closer scrutiny this turned out to be a supply-driven difference rather than a demand difference; women generally accept any

available job with less regard for the level of skill or payment than men do. Paradoxically, women are therefore often overemployed and underemployed at the same time; working long hours in multiple jobs while often doing work they are overqualified for, and earning less than they potentially could.

Categorization of occupational multiplicity strategies

Within the group of interviewees, three different types of primary/secondary job combinations were observed.

The first is the *'sound basis' combination*: the preferable combination is one based on a permanent job with the government or with another employer that is perceived as sound and secure. Some 26% of respondents fell into this category. Banks, insurance companies, utility companies and teaching jobs were mentioned as providing a sound basis. Interestingly, in an economy based on tourism, permanent jobs at hotels and restaurants were mentioned less as a first preference.

Such a permanent reliable office job is sometimes combined with a side business rather than a second job. This can range from white collar, administrative or consultancy activities on the one hand to catering on the other hand. An important side activity in this category is the renting out of apartments, in many cases to immigrants. In Aruba for instance, the number of privately owned and rented apartments and other sub-units is stated by official sources as close to 7000 of a total of 35,000, or 20% of all housing units (CBS Aruba 2010, p. 197). At present the number of units is estimated as closer to 10,000 (Acosta 2016). Building a small apartment complex was and still is a favorite investment among local households, as the tourism boom brought opportunities for extra income coinciding with a surge in demand for affordable individual housing units among immigrants. Likewise, in Sint Maarten, the number of dependent units is established at 7,230 out of a total of 12,908 dwellings, or 56%. This reflects not only the higher proportion of recent immigrants in Sint Maarten society, but also the younger population as well as a slightly broader definition of a non-independent housing unit (Department of Statistics 2016). The sound basis combination is mostly found among locals, while the level of necessity of secondary income sources is less than with other combination strategies. The number of hours worked on secondary jobs was below the 21-hour average in the total sample.

The second is the *'formal/informal' combination*: for people without access to a permanent government or white collar job needed for a 'sound basis' combination, the next best thing is to find any permanent or temporary formal job with a reliable employer, in order to secure the socio-economic basics like medical insurance or, in case of immigrants, work and residence permits. In some

cases, the primary source of income is a sole proprietorship or other business form. The primary job may be on the middle to lower levels in the hospitality industry (e.g. a casino, transport service, security firms or in qualified construction jobs). Next to this first job, secondary sources of income are sought, often in the informal sector. This can be any cottage industry, skilled services like car repair or plumbing, driving a taxi, catering, cake baking and other services. The secondary sources may vary and can be seasonal, but they are needed for long-run survival, as the primary job or business is not sufficient as a permanent sole income source. Formal/informal combinations are found among locals and immigrants alike, and 39% of respondents could be categorized as working in such an arrangement.

The third and final category is the *'opportunistic' combination*: a more fluid situation is found at the base of the social pyramid, where workers juggle several part-time or full-time formal or informal jobs. Of all respondents, 35% fall in this category. Generally, these jobs are not permanent, and there may or may not be a full-time contract among them. Most of this category concerns unskilled labor such as hotel or private-home housekeeping, gardening, delivery jobs, low-skilled construction jobs or work as a security guard. This category is almost exclusively made up of immigrants, who in some cases work below their qualifications especially in the early stages of residence. The number of hours worked in the primary job was below the overall average at 33 hours, while the number of hours worked on the combined secondary jobs was 26, which was above the average in the total sample.

Drivers of resilience: occupational multiplicity strategies and migration choices

Workers in a situation of occupational multiplicity indicate the wish to move to a more formal and more secure combination of jobs; in other words, up the ladder of combination strategies. In reality, however, adverse economic circumstances may push them down the ladder instead. Likewise, many acknowledge their situation of overemployment and the problems it entails. Respondents indicated the wish to work fewer hours, or they saw it as a temporary fix, with push (high cost of living) as well as pull (opportunity to earn and save more money) factors. These combined vertical (between categories) and horizontal (number of hours) flexibilities lend a high degree of resilience to households individually and by extension to the economy collectively, by absorbing volatility in the level of economic activity without causing immediate social and economic disruption. It is clear, however, that this degree of flexibility takes a significant toll on the workers involved and their families, and may be unsustainable in the long run.

Moreover, in the event of long-term failure to secure sufficient employment, migration is seen as just another option in the array of employment choices. For

the US Virgin Islands, US citizens see outmigration to the mainland as a ready and obvious scenario. Many even tried and came back if acculturation in the continental USA did not work out. Sint Maarten has the heaviest presence of immigrants in the workforce for whom remigration is always a latent option. Aruba has a relatively somewhat smaller immigrant population from the Caribbean and many from nearby Colombia, with return migration always being an option in case of economic adversity. In this way, remigration to the country of origin creates a socio-economic safety valve or cushion for the SITEs in question, as noted above. The tourism development in Aruba, Sint Maarten and the US Virgin Islands has been mostly one of (intermittent) growth, without deep recessions with a large-scale return of redundant workers. In exceptional cases, as with the large-scale destruction of the Sint Maarten tourism industry by Hurricane Luis in 1995, thousands of immigrants, legally residing and undocumented alike, repatriated, taking the edge off a possible social crisis. Moreover, there has always been a strong element of seasonal and circular migration connected to the tourism industry. Migration acceptance as part of a wider pattern of occupational multiplicity, therefore, is a definite factor engendering resilience.

Discussion: Sponges in the Sea?

Both scholars and international organizations have argued that a heavy concentration (or dependence) on one export product or service, such as tourism, is a clear manifestation of economic vulnerability to external shocks (Briguglio 1995; Liou and Ding 2002; Witter, Briguglio, and Bhuglah 2002; Briguglio et al. 2009). And yet, a micro-approach suggests otherwise: SITEs in the Caribbean are not particularly vulnerable because of their one-sided reliance on tourism as the engine of export earnings. If anything, long-term stressors are a more important threat to SITEs than sudden external shocks. Several mechanisms may help explain a certain intrinsic lack of vulnerability in Caribbean tourism economies, among them the high proportion of timeshare owners and other repeat visitors who are relatively impervious to negative incidents, and the short-term tendency to lower accommodation prices in the face of falling demand where price elasticity is sufficiently high. The Natalee Holloway affair in Aruba and the relatively fast recovery of Sint Maarten after Hurricane Luis in 1995 are cases in point. In these examples, however, low vulnerability is mixed with active resilience as well: this being the successful implementation of strategies – by governments, but more significantly 'on the ground' by individuals, households and businesses – to counter the effects of such external shocks. Occupational multiplicity is one important plank in such a strategy.

At the macro level, an important factor contributing to resilience, or coping capacity, is the tendency of the Caribbean SITEs to attract immigrants in times of

growth and 'shed' parts of the labor force after heavy external shocks, like the sudden closing of the refineries in Aruba in 1995 and St Croix in 2012, or the 1995 hurricane in Sint Maarten. This process of ebb and flow in the labor force, however, is not limited to situations of sudden external shocks: it takes place with seasonal labor and milder recessions as well. It could be argued, however, that this process challenges the meaning of 'national' in national economy or national resilience. All Caribbean SITEs have developed by virtue of importing a vast amount of regional labor, to such an extent that approximately 50% of Sint Maarten's population and 55% of its labor force consists of first-generation immigrants. In this demographic sense, the SITEs are like sponges in a Caribbean Sea, attracting and ejecting people from surrounding areas in tandem with the pace of economic growth or adversity. If this constitutes resilience, it should be recognized as resilience of an inter-territorial, or regional setting: SITEs like Aruba, Sint Maarten or the US Virgin Islands serve as growth nodes rather than entities that can be meaningfully analyzed in splendid, sovereign isolation.

In the sense of active, strategic government policy, resilience in the Caribbean SITEs is arguably linked to the successful implementation of radical specialization on tourism as the main export product, while at the same time displaying strategic flexibility towards new developments in the global arena, diversifying target markets and developing niche products or unique selling points, also known as 'speciation'.

At the micro level, an important dimension of resilience is found in occupational multiplicity and related household income strategies, the flexible attitude towards finding and combining several concurrent jobs. While, in a situation of long-standing economic growth through tourism, the labor market is continually replenished by immigration, existing and new workers find different combinations of jobs and businesses to gain income. There is a hierarchy distinguishable from opportunistic combinations at the foot of the social ladder, via increasingly long-term and formal employment (formal/ informal combinations) to jobs in government and with other solid employers (sound basis combinations). At the lower end of the scale, however, immigrants returning to their country of origin is always a latent option.

Persons engaged in occupational multiplicity indicated somewhat paradoxically that the high cost of living is an important motivation to be overemployed, while at the same displaying different positive, aspirational goals, such as saving for their children's education. For immigrants, transferring money to relatives overseas is a critical inducement.

In the social circles of the persons interviewed, some 40% were engaged in occupational multiplicity. Men and women are working multiple jobs in roughly the same measure, yet women were universally observed to be less discriminating

in accepting new or additional jobs, and therefore more often work below their qualifications.

Conclusion

A combination of vertical (type of employment and combinations thereof) and horizontal (number of hours worked, overemployment) flexibility of individuals and households on the labor market, with the additional migration conduit to the regional labor market, makes for a high degree of socio-economic resilience in the Caribbean SITEs. Such an occupational multiplicity/ migration system provides the flexibility necessary for successful strategies of 'speciation' in these SITEs. The high degree of mobility and adaptability in the labor force makes possible a fast reorientation of (tourism) products and markets in the face of external challenges and opportunities.

Whereas macro-economics suggests a dangerous level of vulnerability of small islands to external shocks, a different epistemic and more micro-economic frame and methodology suggest otherwise. We concur, in line with other studies, that the vulnerability–resilience nexus is more complex than one being simply the other's opposite or corollary (Baldacchino 2011; Philpot, Gray, and Stead 2015). Rather, the condition of export concentration on tourism services in one particular SITE is argued to breed a cultural response that is remarkably not concentrated and therefore resilient and flexible; so much so that it typically involves more than one jurisdiction.

4. Governing SITEs through the tourism area life cycle: carrying capacity and vulnerability issues[11]

Introduction

Aruba and Sint Maarten are two constituent countries of the Kingdom of the Netherlands (hereafter the Kingdom), located at opposite ends of the Caribbean basin. Both started out as Island Territories within the Netherlands Antilles, creating a three-tier governance structure consisting of the Kingdom, the constituent country the Netherlands Antilles and six island territories. Since the 1960s, Aruba and Sint Maarten developed along similar paths into "Small Island Tourism Economies" (SITEs) and have belonged to the group of most intensely tourism-dedicated island economies in the world for the past 30 years (McElroy 2006; McElroy and Hamma 2010). The SITE theory poses that these islands develop along the lines of Butler's Tourism Area Life Cycle (TALC) model (Butler 1980). The main question this article addresses is:

> *How did the governance framework of Aruba and Sint Maarten influence the SITE development of each island, analyzed in phases following Butler's TALC concept? In particular: When and how did governments and other actors acknowledge the islands' limits to their carrying capacity, and how did they react to this?*

The focus is on the role of government, interacting with other agencies, in addressing carrying capacity limits. Different levels in the complex vertical governance structure of the – former – Netherlands Antilles are relevant here. Moreover, special attention is given to planning and policy development in governance, with respect to tourism development itself and its socio-economic and environmental consequences. Finally, the question is addressed what governing options are left to alleviate the stresses caused by SITE development, to increase resilience and to avoid Butlers 'decline' phase.[12]

This governance framework in which the development of both islands has taken place is vertically layered; above each island are the Netherlands Antilles and Kingdom levels that each strongly interact with the local tourism development. International developments and actors play a deciding role as well, shaping international markets and generating foreign direct investments into the islands. Horizontally, how local governments and tourism investors interact is a main determinant of the course and speed of the SITE development in each island.

[11] This chapter was submitted for publication at an international peer-reviewed journal.

[12] In this article, the term 'decline' in reference to Butler's TALC model, is used as shorthand to indicate the "curve D" or "marked decline" post-stagnation scenario described in (Butler 1980, p.11).

Governance of the tourism area lifecycle in SITEs

The governance of two small island communities is embedded in larger horizontal and vertical governance structures. The question how such governance structures, defined as the process of steering and coordinating processes to achieve certain outcomes (Pierre and Peters 2000, p. 23) have influenced tourism development in these island communities. According to Torfing et al. (2013, p. 72) governance "... in its most fundamental conceptual sense, … means steering the economy and society toward collective goals".

The governance framework is used with a horizontal and vertical focus. In the horizontal network, the island government is considered the main actor, but in an always precarious balance with - often overseas – investors. Within this network, the analysis of tourism development and the attempts at planning this development take center stage.

Vertically, both islands are embedded in the post-colonial institutional framework of the Kingdom of the Netherlands, which evolved during the timeframe under review, to an important extent because of tourism development. The vertical structure until 2010 had three tiers; the Kingdom level, that exists only nominally and whose institutions coincide largely with those of the Netherlands, the - now defunct – Netherlands Antilles level, and the island level.

Horizontal and vertical governance networks are intertwined in the governance of tourism development. The article discusses how island processes of tourism development influence and possibly disrupt the vertical structure, while conversely assistance, analysis and planning by the Kingdom influences the islands.

Tourism Area Life Cycle (TALC)

The analysis of the development path of Aruba and Sint Maarten is substantively and chronologically structured along the 'tourist area cycle of evolution' concept introduced by Richard Butler (Butler 1980), later known as the 'Tourism Area Life Cycle" (TALC) concept. The link between the TALC concept and management of a destination's carrying capacity is explored in (Butler 1996), and has been specifically applied to islands and small territories (Briguglio, Butler et al. 1996). The TALC concept has been further developed in the 21st century (Butler 2010; Butler 2006b). For a fairly recent review of Butlers model applied to the Caribbean see Cole's comparison of Aruba to Barbados (Cole 2007). Currently, the TALC concept is often applied to find ways of avoiding decline by appropriate planning, management and development interventions. This I explore from a governance perspective.

Table 4.1. Overview of stages in Butler's Tourism Area Life Cycle

Stage	Tourism numbers	Societal impact	Governance
exploration	Small numbers tourists, attracted by unique natural and cultural features, and no specific facilities for visitors.	Relatively little impact on the community	No far-reaching governance issues
involvement	Visits become more regular and facilities are provided specifically for visitors, contact still high.		
development	Well-defined tourist market area, shaped by heavy advertising in tourist generating markets	Physical appearance of area changes; Social impacts noticeable; Need for imported labor	Local involvement and control of development declines rapidly.
consolidation	The rate of increase in tourism numbers declines; Total numbers still increase	Total visitor numbers exceed local population; Major part of the area's economy tied to tourism.	Effects on society, culture and space more noticeable; Some emerging discontent .
stagnation	Peak numbers of visitors reached.	Capacity levels for many variables reached or exceeded; Attendant environmental, social and economic problems.	Governance becomes a fundamental issue; Status quo no longer an option.
Range of scenarios from decline to rejuvenation	Further decline of tourism numbers, OR new increase of (different) tourism segments.	Destination moves out of tourism, OR reinvents itself by introducing new product dimensions	Result depends on successful outcomes of governance decisions

Source: based on (Butler 1980)

The stages of Butler's life cycle concept (Table 4.1) are used here in a shortened version. The first three stages will be clubbed together further on in the article, as the focus is on the limits of an island's carrying capacity, which tend to emerge as a concern in the development stage, when significant volume growth takes place.

The 'Small Island Tourism Economy' (SITE) concept, of which Aruba and Sint Maarten are both prime examples (McElroy 2006; McElroy and Hamma 2010; Alberts 2016), relates to Butler's model of tourism destination development, in that it is based on a simplified version of the model applied to the island context. For an overview of the taxonomy of island development models and the SITE concept within it, see (Bertram 2006; Baldacchino 2006b; Baldacchino and Bertram 2009).

Vulnerability, resilience and carrying capacity

The vulnerability of tourism destinations to shocks (rapid-onset events) and stressors (slow-onset events) is widely recognized. Calgaro, Lloyd and Dominey-Howes (2014) present a useful conceptual overview and a proposed 'Destination Sustainability Framework'. Shocks play an important role in Aruba and Sint Maarten; especially global economic disruptions that affect tourism demand, but also very disparate localized issues such as the disappearance of a young American tourist in Aruba in 2005 or hurricanes in Sint Maarten such as Luis 1995 and Irma in 2017. This article however focuses primarily on stressors directly linked to the volume and speed of tourism development itself, which are inherently linked to an island's characteristics and spatial, environmental and social limitations. Socio-economic consequences of rapid economic growth, combined with spatial and environmental impacts of tourism itself, challenge island limits in several dimensions, often summarized as 'carrying capacity', as seen in Butler's TALC model.

Though various definitions of carrying capacity exist, a useful example for this article is found in Sint Maarten's carrying capacity study: "*Carrying capacity is usually interpreted as referring to the level of visitor activity that an area can accommodate without adverse effects on the natural environment, the resident community or on the quality of visitor experiences"* (TTCI 2004, p. 4).

Conversely, tourism development that stays within the limits of a destination's carrying capacity can be considered 'sustainable tourism' as defined for instance by the World Tourism Organization. *"According to the World Tourism Organization definition, sustainable tourism development and management refer to the environmental, economic and socio-cultural aspects of tourism, with the establishment of a suitable balance between these three dimensions to guarantee its long-term sustainability"* (WTO 2004, p. 9).

Methodology

Only a small body of academic research exists that pertains to the two islands covered in this article. Therefore, academic sources are used primarily to provide context to the Aruba and Sint Maarten development with respect to international tourism, sustainability, social and economic – island - development. More important is the available "grey literature", especially government- and government-commissioned planning and policy documents. The discussion utilizes a range of research and policy documents pertaining to both islands, analyzing what insights were developed and how these documents' recommendations have influenced governance decisions. Finally, and perhaps most importantly, 33 key actors in the Aruba and Sint Maarten tourism development and governance networks have been interviewed, complementing available written sources. These interviews were analyzed to find common

threads on specific topics and points of analysis regarding the development model of each island. The results of this analysis are used throughout this article. Since fewer documentary sources are available for Sint Maarten, a larger number of interviews was conducted there, (a total of 21 pertaining to Sint Maarten, 10 to Aruba, and two to both islands). A full list of interviewees with a short summary of their relevant roles is available from the author.

SITE tourism takes off; governance in the early TALC stages (1950s to 1970s)

International context

SITEs started out with some measure of connection to the USA, their future main tourism market. In Aruba, the presence of the Exxon-owned 'Lago' refinery created a climate of US-influenced management and technical skills and familiarity with the English language. English-speaking Sint Maarten in contrast was close to being depopulated after World War II because of the lack of economic opportunities and the draw of the oil industry in Curacao and Aruba. At the same time, the island was gradually influenced by the development of the nearby US Virgin Islands into a new tourism destination. According to several respondents from the tourism industry in both islands, the early phases of tourism development in both SITEs were linked to the 1958 Cuban revolution which led US-based hotel- and casino businesses to search for alternative locations in the Caribbean.

Vertical governance interactions

The divergent economic aspirations of Aruba and Sint Maarten generated tension within the Netherlands Antilles in the early TALC stages. This was acknowledged by an expert group commissioned by the Kingdom of the Netherlands to explore possibilities for future economic development for the islands of the Netherlands Antilles (Gemengde Commissie van Deskundigen 1979). The group dedicated an extensive sub-report on tourism and employment in the Netherlands Antillen (Bussink and Jansen 1978, 1-201), which recognizes Aruba and Sint Maarten as the main tourism focal points.

The Kingdom structure played a modestly encouraging role in SITE development, contrary to the generally uncooperative attitude of the Netherlands Antilles government seated in the main island Curaçao. From 1960 onwards, Aruba received funds from the Netherlands to expand the airport and receive cruise ships, becoming a destination independent of Curaçao (Henriquez, O. 2015). Furthermore, Aruba successfully leveraged its influence in the Netherlands Antilles government in the 1950s and 1960s and obtained investments that would be crucial to the take-off of Aruba as a tourism island. Aruba's early success in this

respect was a source of inspiration and reportedly even of envy for Sint Maarten's leader Claude Wathey (Richardson, Joe 2015).

Sint Maarten government's drive for tourism development from the mid-1950s until the early 1990s cannot be understood without the dominant role in politics of A.C. (Claude) Wathey (1926-1998) (Badejo 1989). Virtually all respondents mention his crucial role in setting Sint Maarten's course towards becoming a Small Island Tourism Economy. Though occupying only one of the 22 seats in the Netherlands Antilles parliament, his support usually was needed to form a governing majority in a parliament highly fragmented along party- and island lines. In return, the Antilles' government was happy to exert a less than vigorous level of government control on distant Sint Maarten. Several respondents from business, political and labor union circles described the crucial importance of this system of political brokerage between Sint Maarten and the central government in this era.

Horizontal governance interactions

SITEs displayed a business-friendly attitude when attracting tourism investors. Tax holidays were used, but constituted no comparative advantage to other Caribbean islands, where such arrangements were often even more generous. Several respondents from business and government circles in both islands stressed the business-friendly attitude of government, especially in Sint Maarten, where an explicit "laissez-faire" approach was prominent. Being part of the Kingdom of the Netherlands was mentioned as an important positive factor in the investment climate, as it was perceived to assure the independence of the judicial system and to act as a guarantee against extreme political instability.

Aruba did develop a clear vision on tourism as main industry as early as the 1960s, under political leader Juancho Irausquin, actively separating their marketing strategies from the Netherlands Antilles. The first large-scale hotels in Aruba attracted a very high-spending exclusive type of tourists from the US (Peterson 2015; Henriquez, O. 2015). With shrinking employment at the Lago refinery, the Island Government of Aruba drafted an integrated 'development plan' in 1962, with much attention on tourism development (Government of Aruba 1962, p. 8-9). The study "The future of tourism in the Netherlands Antilles" commissioned by the Government of the Netherlands Antilles in 1969 (Arthur D. Little Inc. 1969, 1-112) predicted a swift transition to mass tourism following the growth of the industry in the islands, with less top segment and more first-time travelers. Simultaneously, the report warned against high economic leakages and low multipliers, as well as the risk of foreign investor interests running counter to the interest of the islands. If the costs of infrastructure and externalities were factored into the equation, the balance could become negative, according to the report.

A follow-up to the 1962 plan was drafted in 1976 by the government's Economic Development Department. The direct cause was the uncertain future of the Lago refinery. An important recommendation was the active – and selective – acquisition of foreign tourism investors, to achieve those high-end hotel investments most favorable to Aruba, as well as those that would offer recreation and entertainment increasing earnings per visitor per day (de Moulin 1976, p. 30).

The governance of the tourism development process was regarded as lacking in this era. Bussink and Jansen stated that it was hard to discern *any* policy regarding tourism by the Island Government of Aruba in the 1970s. Planning or cost-benefit analysis of new investments was non-existent (Bussink and Jansen 1978, p. 27). This lack of planning resulted in decreasing occupation rates as more hotels were built.

The potential of tourism as a development engine for Sint Maarten was recognized at different levels of government immediately after World War II. The Kingdom "Bovenwindenrapport" (Windward Islands report)[13] of 1953 positions Sint Maarten as a destination for yachting, fishing and sports flying from the US (Kruijer, Veenenbos, and Westermann 1953, p. 14). Contemporary economist Henriquez mentioned that Sint Maarten has been 'discovered' by American tourists from the neighboring US Virgin islands where tourism began to thrive after World War II (Henriquez, P. C. 1957). With Dutch and Netherlands Antilles co-financing, "Little Bay Hotel", the first tourist resort to open in Sint Maarten was realized in 1955 (Henriquez, P. C. 1960a; Henriquez, P. C. 1960b; Henriquez, P. C. 1958).

The governance model of Sint Maarten under Claude Wathey was clearly 'laissez-faire', illustrated by the fact that Mullet Bay resort, opening in 1970, was originally to be located on the French side of the island, but the U.S. investors eventually preferred the much less bureaucratic Dutch side (Gibson sr. 2015; Richardson, Ralph 2015).

Illustrating the development phase of the destination, from 1969 to 1976 the number of visitors to Sint Maarten grew almost tenfold and the number of guest nights fivefold. This reflects the construction wave that consisted of the Mullet Bay, Concord, Little Bay and Great Bay hotels. According to contemporary government advisor and economist Tjoa, the success in attracting investors proves that the choice for a one-sided focus on tourism was correct, rejecting the concept of diversification in a small island setting. Already in the 1970s, the per capita income of Sint Maarten had lifted the island above the UN definition of a developing country. *".. the choice of tourism, however risky, is not only reasonable*

[13] The three islands belong to a geographical group that is known in English as the 'Leeward Islands' of the Caribbean. In Dutch however they are considered 'Bovenwinds', the equivalent of 'Windward'.

and justified but also a must." (Tjoa 1977, p. 19). At the same time, Tjoa was one of the first to point out the vulnerability and the potential stressors of the one-pillar tourism economy through the effects of the necessary massive immigration, which would in turn exceed the available housing and led to capacity problems in education and other services. In this phase, migrant labor was still seen as a largely transient and seasonal phenomenon, with workers from the neighboring islands entering Sint Maarten for the high season and leaving again during the low season (Tjoa 1977, p. 23). Bussink and Jansen however, already advised suspending the tax holidays for new hotels in Sint Maarten (Gemengde Commissie van Deskundigen 1979, p. 108). The authors characterized the role of the Sint Maarten government in the 1970s as having an "extremely low profile", concerning both policy as well as administration of the economy. Apart from a laissez-faire ideology, the authors attribute this to possible - improper - conflicts of interest. The authors vigorously recommended strengthening the government apparatus to one that would be quantitatively and qualitatively capable of steering and supervising the only industry on the island (Bussink and Jansen 1978, p. 147).

Carrying capacity and resilience

Sustainability in the modern sense was not an issue in the early stages of tourism development in both islands. Neither the impact on the natural environment nor the negative feedback of the intense development on local quality of life or the tourism product itself, was acknowledged as a problem yet. However, as early as 1969, Arthur D. Little warned against the high leakages of foreign tourism investments, as well as high demand for foreign labor (1969, p. 48-49).

As for Aruba, Bussink and Jansen clearly saw some shortcomings in the tourism product itself, such as the mismatch of hotel capacity and airlift, but started seeing side-effects as well in insufficient infrastructure, a lack of vocational education in hospitality jobs, and the broader social effects of tourism growth (Bussink and Jansen 1978, p. 28). Similarly, they concluded that the Sint Maarten tourism model lacked economic robustness. Of the total revenue of the sector, only the wage sum contributes to the economy, and that only partially, as many foreign workers remitted part of their earnings to their home country. There was no government apparatus capable of steering and supervising the only industry of the island. Further immigration was advised against and the hotel sector should grow no further. The authors at this stage clearly indicated certain vulnerabilities of developments in Aruba and Sint Maarten, such as the heavy reliance on foreign labor in both menial jobs as well as among managers and entrepreneurs (Bussink and Jansen 1978, p. 150).

The consolidation phase; a governance capacity tipping point (1980's and 1990's)

International context

In the early TALC phases the relatively exclusive SITEs were not very vulnerable to shocks and instability in world markets. The increased interconnectedness of the world economy in the 1980s and 1990s and the advent of mass tourism changed this. The 1979 energy crisis followed by the recession of the early 1980s is mentioned by respondents as the first instances of noticeable effects of external shocks on the Aruba and Sint Maarten markets. The affordability of travel brings mass tourism, the popularity of the timeshare product and the introduction of cruise ships that now rivalled ocean liners in size. Lago on Aruba and the Shell refinery on Curaçao refinery closed in 1985, causing a remigration wave to Sint Maarten, absorbed by the fast-growing tourism industry.

Vertical governance interactions

The longstanding Aruban dissatisfaction with the Netherlands Antilles structure, amplified by its divergent economic development, led to the island breaking away in 1986. The Aruban 'Status Aparte' became the backdrop to the now autonomous island's launch into one of the foremost Caribbean holiday destinations. Subsequently, Sint Maarten represented a similar centrifugal tendency in the remaining "Antilles of five", leading to the eventual dissolution of the Netherlands Antilles in 2010.

As in previous decades, strategic thinking about the development of the islands was most often initiated at the Kingdom level. In the early 1980s a committee composed of representatives of the Netherlands and the different islands of the Antilles drafted a report on the vision for the islands after Aruba's exit. The report voiced concern about the possible negative impact of the global recession of that time on the growing tourism sectors of Aruba and Sint Maarten, while recognizing the apparent economic resilience of these economies to external shocks (Gemengde Commissie Toekomst Antillen 1982 p. 45-46).

The grand bargain between Sint Maarten's dominant political party and their counterparts at the Netherlands Antilles level that had worked so well for three decades fell apart in the 1980s. As a consequence of the social and economic stresses stemming from rapid tourism development, Claude Wathey was successfully challenged at the polls for the first time, and could no longer deliver automatic support to the governing coalitions at the Antilles level. At the same time, the concerns in the Netherlands as well as the Antilles about the integrity of government in Sint Maarten grew and eventually led to 'higher supervision' being imposed by the Kingdom on the island in November 1994.

Horizontal governance interactions

In the final decades of the twentieth century, Sint Maarten and Aruba entered the mature stages of the tourism area life cycle. They became high-intensity SITEs with a 'tourism penetration index', ranking 1 and 6 respectively among tourism islands worldwide in 1991 (McElroy 2006, p. 70), when scored on a combination of visitor spending per capita, average daily visitors per capita and hotel rooms per square kilometer, and numbers 1 and 4 in the Caribbean in 1993 (McElroy and de Albuquerque 1998, p. 153). This also meant that the pace of tourism growth leveled out and fell behind several other island destinations (WTO 2004, p. 15), consistent with the TALC 'consolidation' phase. Sint Maarten was struck by hurricane Luis in 1995, and consequently the stay-over numbers over this period declined considerably (Sint Maarten Tourism Department 2013a; Sint Maarten Tourism Department 2013b). In both islands cruise tourism grew fast, increasing in importance compared to the stay-over sector (WTO 2004, p. 56). This can be seen as a sign of a strategy to generate more income as the limits of the stay-over sector are reached. This was a gradual development in Aruba, while in Sint Maarten this increase was the consequence of a deliberate strategy to quickly fill the gap caused by the 1995 hurricane.

In Aruba the 1980s and 1990s were dominated by the enormous push in hotel construction after the attainment of '*status aparte*' for the island in 1986. Planning of this hotel boom had started some years earlier, but the sudden closure of the Lago refinery in the same year caused the plans to be executed in an accelerated way with financial aid from the Netherlands. Sam Cole, economic researcher and advisor to Aruban governments since 1981, was the main author of a macro-economic plan commissioned by the Island Government of Aruba in preparation of the '*status aparte'* (Cole 2015). In addition a 'tourism master plan' was drawn up (Spinrad 1982). The physical aspects comprising an infrastructure and zoning master plan were worked out by Sasaki Inc. (Sasaki Associates 1983). The zoning part of these plans was never put in effect, however (Biemans 2015). In the 5-year periods between 1985 and 2000, visitor arrivals to Aruba increased by 109.4%, 43.0% and 16.5% (Vanegas and Croes 2003)**.** As a consequence, Aruba in a few years experienced an accelerated and compressed 'development' stage in terms of Butler's TALC.

Four respondents indicate that the post-1986 hotel development boom suffered from significant overshooting. Whereas the expectation was for part of the planned projects coming to fruition, in reality most of them did. This brought the number of hotel rooms not from 2,000 to the expected 4,000 but to 7,000. As each room was estimated to add – directly and indirectly - five workers to the active population, the additional demand for labor rose to 25,000 instead of 10,000. This is interesting, because the heavy investments in hotel capacity were motivated by the need for job creation after the closing of the refinery, while Lago

had less than 1,400 employees upon closing, with perhaps a comparable number of indirect jobs with suppliers and subcontractors (Ridderstaat 2007, p. 259). As a result, the labor market started to show shortages as early as 1988 (Dijkhoff-Pita 2016).

Already during the construction boom of the years 1986-88 a moratorium was drafted to prevent overshooting of the goals. However, frequent changes of government prevented this measure from being implemented. Six respondents with political, private sector and academic backgrounds indicate that planning and execution of plans was hampered because the two dominant political parties had the tendency to discard the other's plans and initiatives after coming to power, regardless of their merits. This is seen as a determining factor of the ineffectiveness of government despite the quality of planning.

The development wave of the early 1970s caused Sint Maarten to go through an earlier TALC 'development' stage than Aruba. The gradual reduction in quality set in earlier as well. The leading Mullet Bay resort declined economically at the end of the 1970s, closing temporarily to open under new management in 1980. Five respondents mark this as a tipping point in Sint Maarten's tourism product, shifting towards less quality and more quantity; an indication of moving into the 'consolidation' phase.

The decline of the high-end hotel tourism in Sint Maarten coincided with the introduction of the timeshare product. This was not primarily the result of government planning, but rather the opportunistic facilitation of developments initiated by the business sector. Timeshare sales in that era worked best in a market with established stay-over tourism with a high number of repeat guests who would be interested in buying a timeshare, exactly the situation in Sint Maarten (Vlietman 2015). Timeshare can therefore be seen as a product fitting the TALC consolidation stage. Ten respondents characterize the timeshare boom as happening too fast, and as a good idea with some bad consequences in the absence of regulation and a lack of attention for the socio-economic side-effects. Some respondents indicated that the timeshare boom also reduced the need for marketing the island as a tourist destination, as the timeshare owners constituted a kind of 'captive audience'. This neglect of marketing damaged the island in the long run. Compounding the timeshare trend, many existing hotels converted part of their traditional room stock into timeshare units as well.

The 1980s saw a number of large government plans for infrastructure works (Richardson, Ralph 2015). The execution of these plans however, caused a number of high-profile investigations into malpractices at island government level, leading to the implementation of higher supervision in 1994. This meant the local government authority was suspended and replaced by representatives of the Netherlands Antilles and the Kingdom. Reacting to a situation of weak governance

and planning, this higher supervision entailed an initiative to draft a Multi-Annual Policy Plan (MAPP). A preparatory discussion paper clearly sets the tone by referring to

> *"all kinds of problems that are the result of the uncontrolled growth process" and to "developments (that) have for a long time occurred (sic) at a fast pace without action being taken to provide the accompanying infrastructure and measures". … "In Sint Maarten, the negative external effects of an impressive economic, i.e. touristic development, are obvious and they all relate to one phenomenon: overexploitation. Overexploitation of nature, of infrastructure, of human resources combined with too little attention to a strategy of controllable continuity and renewal of resources."* (Island Government Sint Maarten 1995 p. 2)

The MAPP initiative was cut short by the 1995 hurricane, and an actual plan was published a few years later. This plan does clearly take position on quality over quantity, and on carrying capacity and quality of life.

> *"Mass tourism at the expense of the quality of life is not endorsed by government. Instead, government will adopt a policy of managed growth. ... In addition, issues such as the carrying capacity of the environment, the level and type of infrastructure and the labor requirements will be studied."* (Island Government Sint Maarten 1997, p. 31)

Also, the immigration-dependent nature of the chosen model is explicitly acknowledged and addressed:

> *"One of the main problem areas identified that threaten the well-being of our society is the strained relationship between native and immigrant groups. ... Growth such as we have known would not have been possible without importation of foreign labor, however, this had and continues to have consequences."* (Island Government Sint Maarten 1997, p. 45)

Carrying capacity and resilience

In Aruba the problem of overshooting soon became apparent in the accelerated development phase. The island did not immediately face the same physical constraints as Sint Maarten, but immigration remained high to supply the necessary workforce for the unexpected success of the hotel industry development. This in turn put pressure on housing, education and had other social and cultural impacts at a pace Aruba was unprepared for.

Sint Maarten reached the limits of its carrying capacity earlier than Aruba, and its vulnerability increased as well. Five respondents mention the stock market crash of 1987 and the Iraqi invasion of Kuwait in 1990 as external economic shocks that were clearly felt for the first time, and the fact that crime became a structural factor of concern in Sint Maarten society for the first time since the start of tourism development. This illustrates the consolidation phase vulnerability of this SITE.

Vulnerability to climate factors is a special concern for Sint Maarten. The 1995 hurricane Luis laid bare many of the island's shortcomings in terms of infrastructure, housing and governance, direct consequences of tourism development exceeding the carrying capacity of the island. Ten years after this hurricane the island had recuperated to the same number of hotel rooms again, but the character of its tourism product mix had fundamentally changed to a lower quality level, more dependent on cruise tourism and the timeshare product than ever before. This development underscored the gradually decreasing resilience of this SITE in the consolidation phase.

The TALC consolidation phase shows a tipping point being reached in the governance of the SITE model. The socio-economic impact of the rapid tourism development now causes major stressors. The rapid growth of the industry has had direct impacts on the natural environment and on infrastructure needs. Indirectly, the growth in workforce and thus population increased the demand for public services such as education, health care, transport and waste management. On all these points, the SITE governments did not meet their expectations. The direct and indirect stressors combined clearly outgrew the governance capacity and challenged the sustainability of the SITE model.

The stagnation phase; increased vulnerability beyond the limits of carrying capacity (2000 to present)

International context

At the turn of the 21st century, both Aruba and Sint Maarten operate in a fully globalized world tourism market with increased competition. Their tourism product becomes more mainstream and permanently loses its exclusivity. Internationally, Sint Maarten and Aruba in 2001 ranked numbers 2 and 3 out of all island destinations worldwide in terms of the "tourism penetration index", and 1 and 3 in 2006 (McElroy 2006; McElroy and Hamma 2010). These numbers indicate that while moving from consolidation to stagnation, both SITEs intensified their tourism development in relation to their population and surface area to a point beyond any other island nation in the world. Meanwhile, the global sustainable development debate, entering the mainstream with the 1987 Brundtland report and followed up by the 1992 agenda 21 (Rio declaration) is

recognized as having specific meaning and relevance to island developing states and territories. This is illustrated by the United Nations SIDS efforts resulting in the 1994 Barbados Programme of Action and its follow up initiatives.[14]

Vertical governance interactions

Since 2000, the Netherlands showed a more business-like attitude towards its Caribbean Kingdom partners, and no longer aimed to keep the remaining five islands of the Netherlands Antilles together. The aftermath of the 1995 hurricane Luis and the active role of the Netherlands in the reconstruction of Sint Maarten reshaped the relationship between Sint Maarten, the Netherlands Antilles and the Netherlands, opening the way for the dissolution of the Antilles in subsequent years. As the effects of the 1995 hurricane laid bare the vulnerabilities and imbalances of the Sint Maarten SITE development model, the reconstruction aid offered by the Netherlands strongly emphasized sustainability and redressing imbalances such as the insufficient infrastructure and the lack of affordable housing on the island. The Netherlands Antilles were dissolved in 2010, with Sint Maarten becoming a constituent country in the Kingdom on the same footing as Curaçao and Aruba.

Horizontal governance interactions

Both SITEs experienced slower tourism growth combined with a gradual decrease in quality and value added of the tourism product. This is reflected in stagnant labor productivity, while the economy and population continued to increase, resulting in extensive growth (Alberts 2016, p.85). The timeshare product, credited by several respondents for its contribution to resilience because of the almost guaranteed repeat visitors, now became footloose. The product became increasingly based on points systems with a degree of choice between destinations, instead of being bound to a fixed 'original' location. Additionally, the 21st century saw the advent of the "all inclusive" formula among Caribbean hotels. Both trends were in line with Butler's characterization of resorts becoming 'divorced from its geographic environment' in the latter stages of the TALC (Butler 1980, p. 8).

In the early 1990s the first warnings about the limitations of runaway development in Aruba were voiced by Sam Cole to the Minister of Tourism, advising a move towards more boutique hotels and less mass tourism, as large hotels have a diminishing profitability and smaller multiplier effect on the local economy (Cole 2015). Productivity stagnated and eventually declined in the 21st century (Peterson 2015). After 2000 – influenced by the Rio conference of 1992

[14] Specifically, the vulnerabilities of the small island tourism economies are recognized, as illustrated by the "Making Tourism Work for Small Island Developing States" by the World Tourism Organization's department of Sustainable Development in Tourism (WTO 2004).

and its aftermath - carrying capacity became an active topic of debate in Aruba as well (Dijkhoff-Pita 2016).

In 2003, Aruba's National Tourism Council (NTC) organized a conference on "a framework for sustainable tourism in Aruba" (Cole and Razak 2003). It resulted in a choice between three scenarios: luxury chains with an occupancy driven strategy, average hotels with a growth target, or small boutique hotels with the aim to match unemployment. Reflecting several years later on the impact of the NTC, Cole concludes: "*Unsurprisingly, given the motivation for the NTC, the last strategy (Matching growth to Aruban needs) was ''agreed'' as the starting point for NTC Stage 3".* However, policies soon reverted to well-trodden paths; *"…Given the opportunity, several upscale hotel developments, only cosmetically based on the Framework, were solicited.*" (Cole and Razak 2009, p. 423).

The Aruban government embarked on another ambitious strategic planning exercise in the late 2000s, resulting in the strategic plan entitled "Nos Aruba 2025" (Nos Aruba 2025 2010). The report laid out strategies along social, economic, environmental and good governance dimensions, and considered itself a follow-up to the 2003 NTC. It referred to Sam Cole's advice for a 'boutique hotel' orientation, and its subsequent lack of implementation (Nos Aruba 2025 2010, p. 35). The intrinsic limitations of SITE development were clearly indicated in the report. In Aruba, real GDP had grown by more than 30% from 1995 to 2008. However, the population grew at the same pace. Therefore, real per capita GDP had remained stagnant, making for a completely extensive economic growth (p. 35). Nevertheless, while recognizing tourism and its rapid development as the cause of many imbalances in Aruban society, "sustainable tourism development" was just one of twelve priorities indicated by the report. The goal of diversification was more prominent, flanked by innovation and focus on the financial sector (p. 68). The report ambitiously recommended curbing hotel room capacity to focus on quality rather than quantity, relying more on boutique hotels, and reducing tourism's contribution to GDP down to 40% in 2025 (p. 88). However, actual measures proposed did not go much further than a moratorium on hotel capacity (p. 126). It is indicative of its general nature that the report did not include any specific approach to the timeshare sector, nor even mentioned the "all inclusive" phenomenon.

Confirming the TALC stagnation phase analysis, the Aruban Central Bureau of Statistics gave the following summary of the recent trends in Aruba's tourism development model, adding the aspect of loss of purchasing power as well:

> *"Nominal and real GDP reached their highest level in 2008, however, real GDP per capita is already at a downward trend since the year 2004. This means that during the last decade Aruba's economy increased just by volume. Currently Real GDP per capita is back to the level reached in 1989, and despite all effort of the government, wages are not keeping up with the level of inflation."* (CBS Aruba 2014, p. 13).

Governance of the tourism development was further laid down by the Ministry of tourism in the 2011 report "Winning the future" (The Dick Pope Sr. Institute for Tourism Studies 2011). The report sought to reinvigorate the Aruban tourism product, while improving the quality of life of the population. The report concluded from stakeholder consultations that: "*… the main concern is related to the perception that Aruba has overstretched its resources to the extent that* (tourism development) *might not be sustainable in the long run*. *This concern is associated with over-development, migration pressures and their effects on the cultural and social fabric of the nation, and the slowing of productivity levels in the economy."* As in previous strategic reports, one of the main challenges recognized was to move from a volume-oriented focus to a value-added focus on tourism (p. 154).

Sint Maarten respondents from tourism, labor and government sectors mentioned the large influence of the post-hurricane Luis Emergency Relief Funds (ERF) - supplied by the Netherlands - in terms of planning, infrastructure and housing improvement. This aid financed a new cruise ship harbor, opening the way for a shift in tourism emphasis towards cruise tourism. The fact that timeshare owners returned much faster than hotel visitors compounded the movement towards lower value-added products. It took Sint Maarten until 2006 to return to the same number of stayover accommodations as before hurricane Luis, with a notable reduction in average quality (Dubourcq 2015a; Dubourcq 2015b). Additionally, the ERF funded a comprehensive 'Carrying Capacity' study in the early 2000s (TTCI 2004, 1-187). The report is straightforward in its assessment of tourism development governance: *"Government policy for the future development of tourism on St. Maarten appears to be ambiguous, especially in regard to the quality vs. volume issue and the desired balance between stay-over, cruise and yachting visitors."* (p. ii). More generally, the report was very critical on the capacity of government to manage the chosen development path: "*Continued economic development in St. Maarten has also been curtailed by the lack of corresponding growth in government administrative capacity"* (p. vii). A lack of action on the limits of carrying capacity was clearly observed, together with the fact that negative externalities had not been reflected in the costs of production. (p. vi-vii).

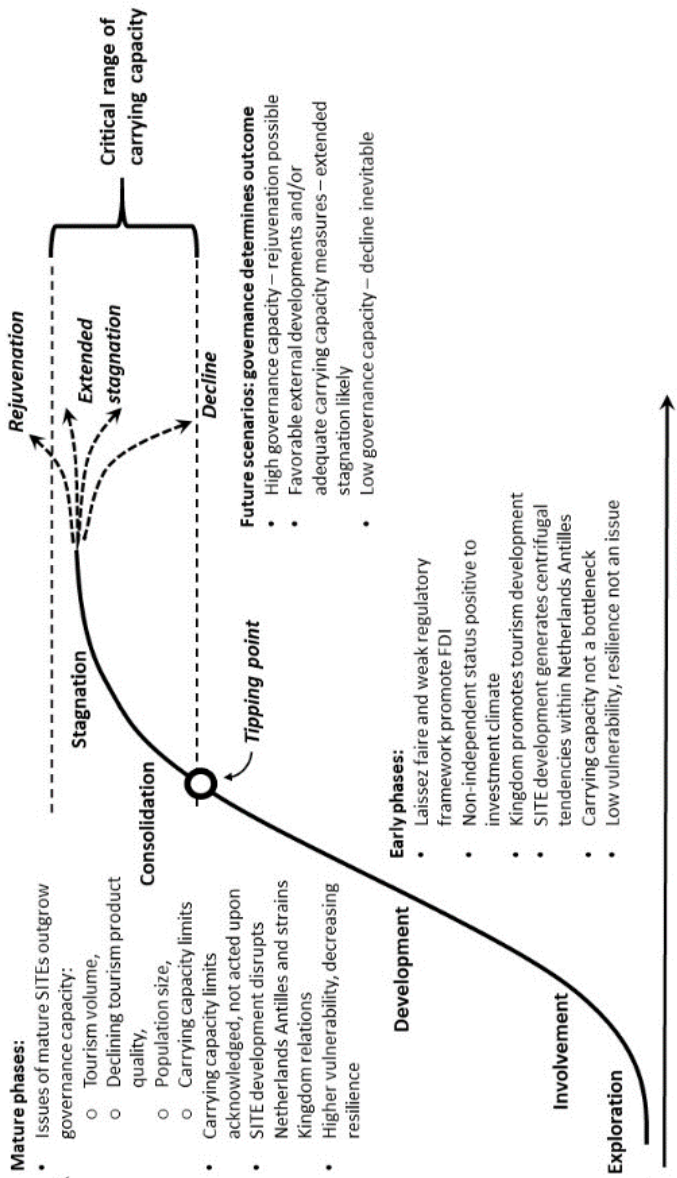
In tandem with the carrying capacity study, a Tourism Master Plan was drafted "*A Blueprint or Road Map for future sustainable development"* (TTCI 2005, p. 3).

However, the analysis and conclusions of the carrying capacity report did not resonate clearly in the Tourism Master Plan, as it identified three key goals: Growth in yield from tourism, increase in employment (and upgrade in quality) and a high standard of living combined with good quality of life. Increase in the daily expenditure by all categories of visitors was stated as a means to achieve value growth. However, it remained unclear how this was to be achieved. In direct contradiction with the carrying capacity study, the plan foresaw a sizable growth of accommodation capacity (TTCI 2005, p. ix). The conclusions from the Carrying Capacity Study hardly seemed to have influenced the choices or strategies in the Tourism Master Plan.

Carrying capacity and resilience

In both SITEs, a level of awareness existed regarding the limits of each island's carrying capacity in the TALC stagnation phase, as well as to the loss of quality of the tourism product. Vulnerability to external shocks was already noticeable in the consolidation phase, and became more manifest in the stagnation phase. In parallel, resilience decreased. A less unique and recognizable tourism product made it harder to win back lost market share after an external economic shock or a natural disaster. Furthermore, the continued stress on the social and economic structure made it more difficult to absorb shocks and to recover from its effects.

Figure 4.1. SITE governance through the stages of the Tourism Area



Source: Derived from (Butler 1980) Additional text and the "tipping point" indication are the author's.

Conclusions; SITE governance through the lifecycle stages

> *"A paradox of tourism is that the industry carries within it the seeds of its own destruction. Successful development of a resource or amenity can lead to the destruction of those very qualities, which attracted visitors to it in the first place."* (TTCI 2004 p. 2)

Aruba and Sint Maarten have each followed the stages of Butler's TALC, to a large extent concurrently. In doing so, the islands have become two of the most intensively developed SITEs in the world. In terms of horizontal governance, island governance of this process was mainly passive, using modest investment incentives and otherwise committing to a clear 'laissez-faire' attitude towards local and foreign investors. This governance attitude was very conducive to tourism and economic growth up to the TALC development phase, but reached a tipping point when the volume of the industry as well as the population and its needs overcame the governance capacity in the mature TALC stages. The weak governance structure now became a liability, resulting in problems that challenged the future of the SITE model. Table 4.2 provides an overview of differences and similarities in governance aspects in both islands throughout the stages of the life cycle.

In terms of vertical governance, the divergent SITE model of both islands fueled a decades-long process that eventually led to the disintegration of the Netherlands Antilles. The Kingdom has at various stages played an active role in early on anticipating and recognizing the potential of both islands as tourism destinations and in providing planning as well as financial assistance. The vertical governance dimension reached a tipping point in the consolidation phase as well, resulting in strained relationships between the SITEs and their Kingdom partners, in particular in the case of Sint Maarten.

The lack of action on the carrying capacity challenges after reaching the tipping point did not stem from a lack of problem acknowledgement. Around the turn of the 21st century, the SITEs themselves began to generate critical policy recommendations. At first, this was motivated by a slowing down of visitor growth, a shift towards lower-value tourism products, and a complete stagnation of real per capita GDP. Under these circumstances, governments, the tourism industry and other agencies started to pay more attention to the now undeniable limits of the carrying capacity and to the shortcomings of government itself. However, knowledge did not lead to action. Even basic quantitative measures such as moratoria on hotel construction have never been effectively implemented, let alone qualitative measures such as more selective investment decisions. This lack of decisive intervention makes the risk of sliding from 'stagnation' into 'decline' very real.

Table 4.2. Aruba and Sint Maarten differences and similarities throughout the TALC stages

		Aruba	Sint Maarten
1950s-1970s Exploration Involvement (Sint Maarten: Development)	External factors, vulnerability, resilience	SITE tourism high-end and exclusive, high value, start of jet era. Very low vulnerability to external shocks, resilience is not an issue.	
		Tourism secondary to oil industry	Proximity to US leads to tourism investments
	Vertical	Early centrifugal tendencies from Antilles	Using political leverage to create leeway for SITE development within N.A.
	Horizontal	Gradual tourism investments, governance manageable	Laissez faire policy, one dominant large resort, governance 'supplementary'
	Carrying capacity	Debate on coordination between links in tourism chain, economic leakages	Debate on overheating and labor market
1980s 1990s Aruba: Development & Consolidation Sint Maarten: Consolidation	External factors, vulnerability, resilience	Mass tourism, timeshare, large scale cruise ships, increased competition between Caribbean destinations, first indications of vulnerability of SITEs, gradual decrease of resilience	
		Refinery closes, sudden unemployment	Remigration of oil industry workers
	Vertical	Exit from Netherlands Antilles Hotel investment boom coincides with refinery closure and Status Aparte	Crisis in relation to Antilles and Kingdom, higher supervision, Kingdom-induced planning efforts
	Horizontal	Accelerated Development phase; Cruise tourism grows relative to stay-over. Governance unprepared for large scale development	Decline exclusive resorts, massive timeshare development, scale becomes unmanageable, governance quality crisis
	Carrying capacity	Limits carrying capacity reached after 1986 hotel construction boom.	Hurricane disasters lay bare governance shortcomings, carrying capacity exceedance, questioning SITE model
2000s-present Stagnation	External factors, vulnerability, resilience	Globalization of tourism marketing, timeshare location-independent, all-inclusive resorts, increased cruise tourism and regional/global competition, clear increase in vulnerability to external economic shocks, decreased resilience	
	Vertical	Consolidation status aparte, limited Kingdom	Disaster impact on tourism industry. Kingdom aid

		cooperation regarding tourism development.	promotes sustainability debate. Dissolution of N. A.
	Horizontal	Limited management of tourism development. Challenges in governance of socio-economic and physical dimensions of development model.	Ineffective management of tourism development. Serious shortfall in governance of socio-economic and physical dimensions of development model.
	Carrying capacity	Active debate on carrying capacity, acknowledged by government, yet few effective measures.	Debate on carrying capacity, planning needs and quality of governance, no effective measures.
Future Decline or rejuvenation?	External factors, vulnerability, resilience	Increased interconnectivity, risk of increased global instability, increased competition. Opportunities for regional cooperation for sustainable strategies	
	Vertical	Search for meaningful Kingdom cooperation and synergy; sustainability and resilience as parameters.	
	Horizontal	Strengthening of governance capacity, strategies to move from quantity to quality, value-added products, diversification within tourism market. Including socio-economic and environmental impact (externalities) in decision making	
	Carrying capacity	Mapping the limits of carrying capacity and use as dimensions for sustainable development strategy; concept of 'blue economy'	

On the favorable end of the TALC spectrum of post-stagnation scenarios, 'rejuvenation' could take place, which in this case would also entail bringing quality and quantity of the tourism product back within island carrying capacity parameters. Considering the inadequate role of government in the earlier stages of the life cycle, it is plausible that the role of government and its interactions with other agencies will to a large extent determine the outcome on the scale between 'decline' and 'rejuvenation'.

In a situation of continued weak governance both islands will likely enter a phase of decline beyond repair. Negative feedbacks that are presently already apparent, such as overpopulation, solid waste disposal problems and environmental degradation will worsen and cause an accelerating negative spiral.

If governance remains inadequate, but other factors – such as autonomous 'green' developments within the global tourism industry or a low level of new investments – would slow down further degradation of the carrying capacity, the islands will probably stay in an extended stagnation phase and a slide into 'decline' might be postponed.

If government and other actors develop a grip on the current tourism development model and succeed in addressing the worst effects of the carrying capacity – however, without developing new products and markets - the result may be a prolonged stagnation phase or an extent of decline that may be 'repairable', dependent on external factors such as the level of regional competition.

'Rejuvenation' seems possible only under circumstances of strong governance, with government and other agents acting in concert in the horizontal dimension. Necessary conditions of this way out would be a decrease in volume, paired with an upgrade in quality of the product. New target groups and additional attractions should play a role in this, to increase the average daily spending of each tourist. At the same time, every new investment and activity would need to be tested on its environmental and socio-economic impact. Even then however, serious existing environmental and social damages will have to be addressed as well, as these will have a lasting effect on quality of life on the islands as well as on the attractiveness of the destination.

In any post-stagnation scenario, new external conditions must be taken into account. Tourism is now a fully global market in the digital age, with increased competition between regional destinations in a context of increased challenges of political instability and climate change. These additional external challenges might be partially offset by renewed vertical governance strategies. Cooperation within the Kingdom has in the past contributed greatly to analysis, planning and implementation of strategies. This could be the case again in achieving TALC rejuvenation scenarios. The same goes for more vigorous attempts at regional coordination to reduce detrimental competition and promote synergies in achieving a more sustainable and resilient SITE model.

To achieve the brightest scenario, a new tipping point is needed where governance capacity increases to prevent the SITEs from sliding into TALC 'decline'. Only an invigorated governance structure along horizontal and vertical dimensions will make a qualitative shift possible that realigns the SITE model with the carrying capacity of each island and brings 'rejuvenation' closer.

5. Labor market segmentation and the 'mandatory growth' paradox: why Small Island Tourism Economies grow beyond their carrying capacity limits[15]

Introduction

Island nations and territories constitute a distinct group in the development debate, which was recognized by the 1992 UNCED conference, followed up by the Barbados plan of action in 1994 (United Nations 1994) and its successors, and is illustrated by the popularization of the term 'Small Island Developing States' (SIDS). This group is receiving further attention in the face of climate change, which in turn causes sea level rise and a range of threats to their often fragile ecosystems. 'Small Island Tourism Economies' (SITEs) are recognized in island studies theory as a separate category with recognizable characteristics. Some SITEs seem to have a tendency to expand their tourism sector beyond the limits of their carrying capacity, which is remarkable in the face of recognized sustainability and climate change problems. This article focuses on Aruba and Sint Maarten, two high intensity SITEs in the Caribbean basin. An analysis of socio-economic factors is carried out to explain their drive to continue tourism volume growth, even when this seems to generate no further average income or productivity growth and while the negative externalities from exceeding the carrying capacity are in evidence (Alberts 2016). The question is therefore: *Why does extensive growth in the SITE model persist?*

In explaining this persistent growth, the existing SITE model is extended by also including several socio-economic analytical factors. In parallel to this, the Tourism Area Life Cycle (TALC) concept (Butler 1980; 2006b; 2010; 2011), itself one of the theoretical foundations of the SITE model applied to these islands, is critically reflected upon. Of particular relevance are the 'stagnation' and 'decline'[16] phases of this model, where growth meets geographical limitations - an obvious factor for islands – and other dimensions of carrying capacity. The TALC model originally focused mainly on factors related to the tourism product itself, and to an extent on carrying capacity limitations. This article contributes to the TALC concept by proposing additional socio-economic factors that caused this island category to reach the stagnation phase and will possibly lead to 'decline'. Finally, avenues for prevention of such a scenario are proposed.

Aruba and Sint Maarten are constituent countries of the Kingdom of the Netherlands, who share a history as parts of the former Netherlands Antilles;

[15] This chapter was submitted for publication at an international peer-reviewed journal.
[16] In this article, the term 'decline' in reference to Butler's TALC model, is used as shorthand to indicate the "curve D" or "marked decline" post-stagnation scenario described in (Butler 1980, p.11)

Aruba until it achieved its autonomous 'Status Aparte' in 1986 and Sint Maarten until the Antilles' dissolution in 2010. Even among SITEs they belong to the globally fastest growing and most intensely tourism-oriented island economies (McElroy 2006; McElroy and Hamma 2010). This development path of both islands, combining high levels of foreign direct investment and high immigration numbers, and, after the initial growth phase, stagnant or falling productivity, extensive growth, and deteriorating quality of life aspects has been described by several authors (Cole and Razak 2003; Croes, Robertico R. 2012; Alberts 2016).

Fast tourism volume growth in a small area confronted both islands with the limits of their carrying capacity , including shortcomings in infrastructure, pressure on the natural environment, and a profound impact on population and culture. Despite these limitations becoming evident in the 1990s, the SITE model of Aruba and Sint Maarten has, surprisingly, remained largely unchanged for several decades. Calls for slowing down or modifying the growth of the tourism industry have largely been ignored (Alberts 2020a). This is even more surprising, when we realize that productivity and income levels – reflected by indicators such as real per capita GDP – have been stagnating or declining for at least the past twenty years in both islands. The islands' development path therefore on average does not seem to generate economic benefits, yet it still receives broad support, while attempts at fundamental changes or slowing down growth do not gain traction. This paradox invites a more thorough investigation of the interests of different groups in society in maintaining this development model as is, particularly on the role of the local population versus the immigrant workforce.

Theoretical framework

In this article Aruba and Sint Maarten are viewed through the lens of 'island studies', a theoretical approach that recognizes different island-specific development trajectories. Island studies research has recognized categories of islands such as those relying on Migration, Remittances, Aid and Bureaucracy (MIRAB) or People, Resources, Overseas engagement, Finance and Transportation (PROFIT) (Bertram and Watters 1985; Baldacchino and Milne 2000). Aruba and Sint Maarten however are prime examples of Small-Island Tourism Economies (SITEs), with limited local capital and labor resources, and a heavy reliance on foreign direct investment and immigration. The fast-growing SITEs are a subcategory of island development theory defined and elaborated by McElroy and de Albuquerque (de Albuquerque and McElroy 1992a; 1992b; 1995; McElroy 2006; McElroy and Hamma 2010; McElroy and Parry 2010). The SITE model itself is indebted to Butler's TALC concept, first postulated in 1980 and further evolved since then (Butler 1980; 2006b; 2010; 2011). Crucial to this article are the latter stages of this life cycle, especially when full maturity of a destination leads to 'stagnation', after which, according to Butler, several scenarios are possible,

ranging from 'decline' towards the negative extreme, to 'rejuvenation' at the positive end. The latter may take place if a destination succeeds in re-inventing itself and developing new products for new market segments, effectively starting a new – or additional – life cycle. Recent research concerning the current and imminent future stages of lifecycle development in both islands showed that 'decline' is a likely scenario for both islands in the absence of policies to revise the SITE trajectory (Alberts 2020a).

The specific view on labor market segmentation in SITEs brought forward by this article is inspired by the seminal study 'Double or Quits' published by the Aruban Central Bureau of Statistics in 2004, in which some fundamental questions are explored about the economic sectors immigrants come to work in, and equally important, which sectors locals preferred and moved into (CBS Aruba 2004). This study in effect describes a situation academically known as 'labor market segmentation'. This is a situation of non-competing groups, in which groups in the lower strata are limited in their access to the higher strata of jobs on grounds other than skills and qualifications, for instance based on contractual status (permanent/temporary), on belonging to the formal or informal economy, or on personal characteristics such as gender or immigration status (ILO 2020). In its modern form the concept has its roots in the 1960s studies of Peter Doeringer and Michael Piore on the US labor market (Doeringer and Piore 1970) that led to the landmark study of Piore and Sabel (1984). In the European context, the research by Loveridge and Mok was groundbreaking (1979). These authors argue that labor migration to industrial economies is driven by pull- rather than push-factors, which constitutes one of the drivers of segmentation in the receiving economy. This concept seems highly applicable to SITEs.

Next to labor market segmentation, income (re) distribution within the islands' system can be explained to a certain extent by issues of 'rent seeking'. Rent seeking is a phenomenon originally associated with either monopolies or government, but later on broadened to cover any behavior by an entity to gain wealth without an equivalent reciprocal contribution of productivity (Krueger 1974; North 1987). Rent seeking is closely linked to already wealthy groups securing income redistribution in their favor (Stiglitz, Joseph E. 2013), and is linked to inclusion and exclusion of immigrants. Haan has explored mechanisms of rent seeking in the former Netherlands Antilles from the 1970s through the 1990s (1998).

Throughout this article, the term 'carrying capacity' is used to indicate the limits of both islands in terms of absorbing the effect of the intense tourism sector development, which is especially relevant in the intrinsically limited small island context. Though various definitions of carrying capacity exist, a useful example for this article is found in Sint Maarten's carrying capacity study: "*Carrying capacity is usually interpreted as referring to the level of visitor activity that an area can*

accommodate without adverse effects on the natural environment, the resident community or on the quality of visitor experiences" (TTCI 2004, p. 4). There is a clear link between the tourism destination lifecycle theory and the concept of carrying capacity, as most tourism areas will be confronted with the limits to absorbing increasing numbers of visitors as their destination matures (Butler 1996).

Pressure on a destination's carrying capacity is increasingly recognized around the globe as 'overtourism' or 'overcrowding', an issue threatening the tourism host location and its tourism product. The World Tourism and Travel Council for instance, analyzes five main challenges associated with overcrowding; alienation of local residents, degradation of the tourist experience, overloaded infrastructure, damage to nature and threats to culture and heritage (WTTC 2017p. 18-19). The same concerns are voiced in Aruba's 2003 conference on 'A framework for sustainable tourism in Aruba' (Cole and Razak 2003) and Sint Maarten's 2004 carrying capacity study (TTCI 2004).

Conversely, taking carrying capacity into account could be considered 'sustainable tourism' as defined for instance by the World Tourism Organization;

> *"According to the World Tourism Organization definition, sustainable tourism development and management refer to the environmental, economic and socio-cultural aspects of tourism, with the establishment of a suitable balance between these three dimensions to guarantee its long-term sustainability"* (WTO 2004, p. 9).

Raising the issues: the paradox of stagnant productivity and progress for all labor market segments

As mentioned above, the objective of this article is to answer the question why tourism volume growth in SITEs persists, even this course of action mainly seems to have disadvantages in the current TALC stage. Why does a model that results in stagnant productivity and lacks average income growth, go unchallenged and unchanged? What explains the perceived 'success' of the model and the reluctance to slow down tourism growth or modify its characteristics? This article analyses the islands' labor market in connection with the roles of immigrants and the local population, to find an answer to this paradox.

The paradox indicated above has several dimensions. The first concerns the question of how strong the contribution of further tourism development to an already intensely developed destination can remain in terms of overall growth, productivity and wage levels. The second concerns the link between tourism growth and growth of immigration in terms of labor supply dynamics. The third and most important dimension concerns labor market segmentation on the

islands and the distribution of income between locals and immigrants. How do locals and immigrants differ in income? Do locals or immigrants favor particular sectors and industries, and do they have different opportunities for social and economic advancement? In connection with income (re) distribution, a fourth aspect of 'rent seeking' is touched upon to further explain the difference between in economic position between locals and immigrants.

Investigating this paradox also answers the question whether continuous growth of the tourism industry is an inherent and necessary condition of the development model followed by Aruba and Sint Maarten.

The second objective of this article is to investigate how the nature of the paradox explained above, contributes to analyzing the very real contradiction between the Aruba/Sint Maarten SITE model's persistent growth drive and the islands' limited carrying capacity.

Several reasons why the model is inherently unsustainable, are discussed. The first dimension of the contradiction faced by Aruba and Sint Maarten is that of sustainability of an intense growth model in a small island setting. Secondly, the question of how this situation is linked to the current and future phases in the 'tourism destination life cycle' of the islands. Finally, the demographic effects of decades of high immigration levels on the population pyramid are investigated, and their possible future consequences.

Methodological choices

The methodology used is based mainly on secondary data sources, in particular national accounts, population data and labor market surveys produced by the statistical bureaus of both islands' governments. These are variable, with even rather basic data like population or GDP not always consistent, especially in the case of Sint Maarten[17]. Aruba's statistical data is much better in this respect, considered adequate for IMF purposes (IMF 2019a, annex p.4). This is partly due to the recent attainment of autonomy by Sint Maarten in 2010. Before that date, many indicators were aggregated at the Netherlands Antilles' level. Quantitative sources have been used from sources most recently available, maintaining a meaningful comparison between both islands. It is not always possible to compare Aruban and Sint Maarten data for the same years or according to the exact same

[17] The IMF states in their periodic review of Sint Maarten's finance and economics: "Data provision has serious shortcomings that hamper surveillance. National Accounts data remain of limited quality…" (IMF 2019b, annex p.4).

definitions. Where relevant, the limitations of comparisons are indicated throughout the article.

Throughout this article, a range of reports and other 'grey literature' from local governments, NGO's, the Kingdom of the Netherlands and international organizations are used as secondary sources for qualitative and quantitative data. Academic literature with specific reference to Aruba or Sint Maarten is scarce but used where available and applicable.

A paradox: can a system with stagnant average productivity still produce progress for all concerned?

To explain the paradox of Aruba and Sint Maarten's SITE model, we will look at three related questions. The first question concerns the apparent lack of further contribution of the tourism sector to the economy over recent decades, after the initial growth spurt in both countries. The second question pertains to the immigration-dependent nature of the economic model. This leads to the third question, which is how the labor market segmentation helps explain the nature of the paradox in both islands.

The paradox investigated here exists against the background of a remarkable 'success story' of both islands in the late 20th century. Both countries were already in the top-3 of tourism islands around the world in the 1990s and the first decade of the 21st century in terms of the 'tourism penetration index', the indicator by which SITEs are ranked, developed by McElroy and de Albuquerque (McElroy and de Albuquerque 1998; McElroy and Hamma 2010). Both islands have held this position until the present day. In terms of visitor intensity, Aruba's number of annual stay-over visitors per capita of the population in 2017 was just under 10, by far the highest of the larger Caribbean destinations, and more than twice the number of the next competing destination, the Bahamas (IMF 2019a, p.55). However, Sint Maarten, with 528,000 stay-over visitors against a population of around 40,000 reaches an incredible 13.2 in 2016, the year before the impact of hurricane Irma (Department of Statistics 2017b).

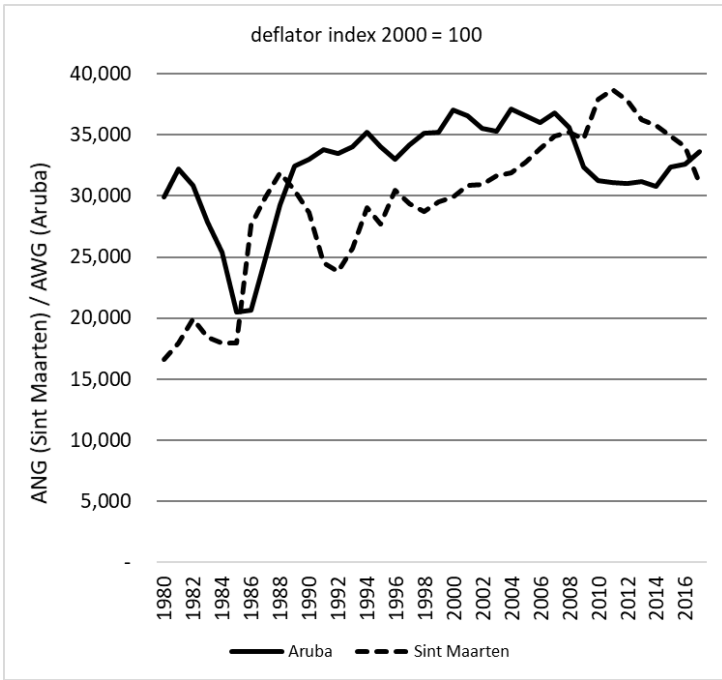
After some decades of strong contribution of tourism to GDP in the 20th century, further increase in visitor volume has added little to economic growth in either island in the last twenty years. Due to the extreme openness of the small island economies, combined with their lack of local production capacity, large investment projects have a very limited multiplier effect in islands like Aruba or Sint Maarten; about 0.1 to 0.2 according to IMF (CBS Aruba 2014, p.5). Aruban real GDP declined from 2005 onwards, falling far behind the rest of tourism-dependent Caribbean. Aruba regained the 2005 GDP level in 2019, due to an increase of cruise- as well as stay-over visitors of about 50% in the intervening years (IMF 2019b, p.24). In conclusion, growth effects of additional tourism in

Aruba are not yet negative, but notably diminishing (IMF 2019a, p. 56). Sint Maarten real GDP increased by a mere 4 percent in total between 2010 and the 2017 hurricane, with a stationary number of stay-over visitors and a doubling of cruise visitors (IMF 2019b, p. 22).

Declining contribution to productivity

Compounding the problem of stagnating overall growth, real per capita GDP has stabilized in both islands since around 1990, and even dropped during some years (Figure 5.1). This indicates a lack of productivity growth in the tourism-dominated economy and helps to explain the average income development. For Aruba, a more precise indicator for labor productivity expressed as GDP per employed person shows a consistent annual decrease since reaching a maximum in 2000 (CBS Aruba 2014, p.6).

Figure 5.1. Real per capita GDP development in Aruba and Sint Maarten 1980-2017

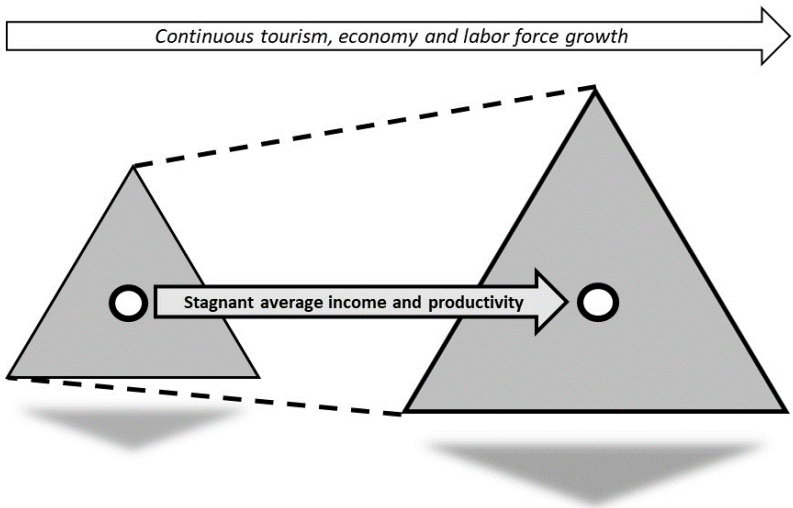


Sources: Aruba: 1980-2012: (CBS Aruba 2019b) 2013-2017: (CBS Aruba 2019a); Sint Maarten: nominal GDP: 1980-1990; (Haan 1998, p.88), 1991- 1995; (CBS Netherlands Antilles 1997), 1996-2009; Department of Statistics, 2010-2011; (Department of Statistics 2014, p. 8) 2012-2017; (Department of Statistics 2018b) population 1980-1999: CBS Curacao; 2000-2016 (Department of Statistics 2017a, p. 17)2017 (Department of Statistics 2019b, p.2) CPI: 1980-2017: (Department of Statistics 2018a). ANG and AWG are both pegged to the US dollar at $1 = 1,79 ANG/AWG.

A 2014 analysis by Aruba's statistical bureau states: *"we can conclude that the construction of new hotels and the addition of new rooms boosted the GDP during the last decades. Till the year 2000 this positive development was translated into an increasing real GDP per capita. Since that moment Aruba is confronted with a continuous decreasing level of real GDP per capita"* (CBS Aruba 2014, p.7). This decrease is confirmed for more recent years (IMF 2019b, p.28). As Figure 5.1 shows, the same is true for Sint Maarten. The more volatile image for Sint Maarten is caused by a weaker infrastructure for data collection and analysis, and by external impacts like hurricanes Luis in 1995 and Irma in 2017. Confirming the trend, labor productivity numbers provided by the IMF show years of intermittent increase and decline with a close to zero balance in Sint Maarten over the last ten years (IMF 2019b, p.15).

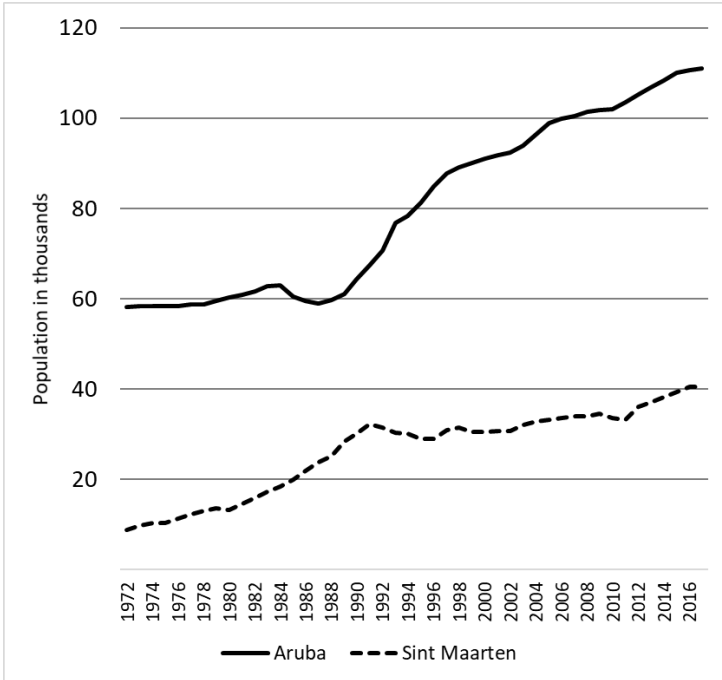
Wage levels in the tourism industry are lower compared to the rest of the economy, which may reflect the relatively low average productivity of the sector given the prevalence of low-skilled jobs. In Aruba in 2000 (average wage level = 100) the tourism wage index stood at 89, the wages in the rest of the economy at 102. Ten years later, this was 117 and 131. In that time, hospitality wages closed the gap with wage levels in other sectors only slightly, from 13% to 11% (CBS Aruba 2014, p.8). As is to be expected, a clear link is recognized between stagnant productivity and wage levels: *"… real GDP per capita is already at a downward trend since the year 2004. This means that during the last decade Aruba's economy increased just by volume. …., and despite all effort of the government, wages are not keeping up with the level of inflation."* (CBS Aruba 2014, p. 13). This correlation is illustrated in Figure 5.2.

Figure 5.2. Mature SITEs show a paradox of persistent volume growth with stagnant average productivity



The limited population size of Aruba and Sint Maarten when tourism development started led to labor immigration in each growth phase of the tourism sector. Figure 5.3 shows Aruba's population growth after the Lago refinery declined and closed in the mid-1980, which was followed by an annual population increase far exceeding natural growth after 1988. Sint Maarten's tourism-driven immigration starts around 1970 when several landmark hotels opened, with a second wave in the 1980s when the timeshare construction boomed, both clearly reflected in the population numbers (Alberts 2016). The 1995 hurricane Luis caused massive destruction and a short period of negative net migration, followed by recovery and slower, intermittent growth.

Figure 5.3. Population Aruba and Sint Maarten 1972-2017



Sources: Aruba: 1972-2013 CBS Aruba, 2014-15 (CBS Aruba 2016) 2016-2017 (CBS Aruba 2019c) Sint Maarten: 1972-1978 (CBS Netherlands Antilles 1981) 1979-1998: (CBS Curacao 2013) 1999-2015 (Department of Statistics 2017a) 2016-2017 (Department of Statistics 2019b)

Cole extensively studied the model of continued tourism development, immigration and carrying capacity in Aruba: "*The combined model demonstrated a 'pumping' effect such that each time a new hotel is constructed a new wave of immigration and settlement occurs increasing the rate at which the island approaches its 'carrying capacity'."* (Cole 2007). Alberts has analyzed the link between immigration and productivity over time in both islands (2016).

As a result, in 2010 34% of all people living on Aruba were born outside the island. During the nineties Aruba had the highest population growth rate of any country in the world, and was the 19th most densely populated (CBS Aruba 2014, p. 10). During the 1970s, 1980s and early 1990s Sint Maarten's population growth rates were even higher than Aruba's (Figure 5.3). As a result, the total proportion of immigrants in the Sint Maarten population (70%) is far greater than in Aruba. Even if we define those born in French Saint Martin or on any island of the former Netherlands Antilles as 'local' – which is socially and culturally justifiable - the proportion of immigrants is still 56%, as per the 2011 census (Department of Statistics 2020c).

Labor market segmentation

The second question related to the paradox pertains to the respective roles of immigrants and locals in the labor market. In both islands, labor market segmentation takes place among locals and immigrants in terms of sectors where they work. In Aruba in 1991, immigrants held 26% of all jobs, in 2000 this grew to 40.5% (CBS Aruba 2004, p. 94). In this period, around 12,700 new jobs were added to the economy, a 43.4% growth. Of this increase in jobs, 10.8% were held by locals and 32.6% by immigrants (CBS Aruba 2004, p. 85).

Table 5.1. Labor market segmentation indicators: changes in employed population by industry and country of birth Aruba 1990-2000 and 2000-2010

1991 - 2000		2000-2010	
Local	Immigrant (developing countries)	Local	Immigrant (all)
Major increase: Real estate, business activities (+1,300) Government (+900) Wholesale, retail (+650) Commercial serv. (+600) **Major decrease:** Construction (-600) Hotels, restaurants (-300)	**Major increase:** Hotels, restaurants (+2,300) Wholesale, retail (+1,550) Construction (1,300) Real estate (+1,000) **Major decrease:** -	**Major increase:** Government (+900) Education (+500) Health, social work (+350) Other community serv (+350) **Major decrease:** Wholesale, retail (-550) Transport, storage, comm (-400) Construction (-150)	**Major increase:** Hotels, restaurants (+1,750) Wholesale, retail (+950) Real estate (+400) Other community serv (+350) Health, social work (+150) Education (+140) Construction (+100) **Major decrease:** Employed by private households (-600)

Sources: 1991-2000; (CBS Aruba 2004, p. 90), 2000-2010; (CBS Aruba 2014, p. 6)

Looking at the labor market changes during the 1990s and the 2000s (Table 5.1) in both decades immigrants were mainly recruited for work in the hospitality industry, trade, construction, and real estate.

After the turn of the century construction tapers off, and immigrants are recruited into a wider array of service industries. Figure 5.4 shows the overall result in 2010. Numbers regarding development over time are not readily available for Sint Maarten, but the 2018 situation shows a heavy representation of immigrants from developing countries in hospitality, construction and trade very similar to that of Aruba (Figure 5.5). Clearly, on both islands immigrants have mainly been recruited to work in and around the core industries of hospitality, construction, trade and real estate.

Immigrants do not close the income gap with local population

When the income levels of jobs for locals and immigrants are analyzed, clear income gaps emerge between the two groups that remain over time. The landmark study 'Double or Quits' on immigration in Aruba shows that in 1990 the median income of immigrants from developing countries was 69% of that of Aruban-born workers, and dropped to 57% in 2000, indicating an increasing disparity. During the same period, the overall median income increased by 54% nominally. While lagging behind Aruban-born working population overall, the first quartile of immigrants from developing countries recorded a higher personal income growth than any other quartile, even among Aruban-born or among immigrants from developed countries (CBS Aruba 2004, p. 105-107). While not equally sharing in the wealth increase compared to Aruban-born workers or immigrants from high-income countries, the lower income category of immigrants did record a significant income gain over time. The conclusion from the Aruban situation is that although the disparity between locals and immigrants increases, lower income immigrants attain a significant increase in their income over time. This indicates that after settlement, immigrants to some extent progress on the labor market. However, the continuous addition of *new* immigrants brings down the overall average. The Sint Maarten 2018 labor force survey shows that the mean as well as the median income of workers born in a developing country was almost 70% of that of someone born on either side of the island or the Netherlands Antilles. At the first quartile level, this percentage is 80, confirming that immigrants are concentrated in the lower income brackets (Department of Statistics 2020a).

Averages disguise the fact that the labor market situation of immigrants – as well as locals – is often more fluid and resilient than it seems. Many persons hold more than one (part-time) job at a time, depending on varying seasonal and cyclical opportunities in a strategy known as 'occupational multiplicity' (Comitas 1963). They consider varying job opportunities, migration and remigration as a continuum of choices. Pragmatically changing and combining jobs gives their personal situation more resilience; seldom do all sources of income in a family fall away at the same time, while remigration is always the ultimate fallback option. Both locals and immigrants have a clear hierarchy of occupational preferences (Alberts and Baldacchino 2017, p.157-158); moving from informal to formal, from part-time to full-time work, and from private sector to (semi-) public jobs, given the opportunity.

Occupational multiplicity and the latent remigration option also give socio-economic resilience to the economies of Aruba and Sint Maarten. Whereas economic growth attracts immigrant labor, economic adversity also quickly leads to out-migration, preventing mass unemployment in times of downturns on the islands. This was particularly noticeable in Sint Maarten after hurricanes Luis

(1995) and Irma (2017). Overall, immigrants feel their move to be a marked improvement in their lives, even though their inclusion in the host society is not perfect.

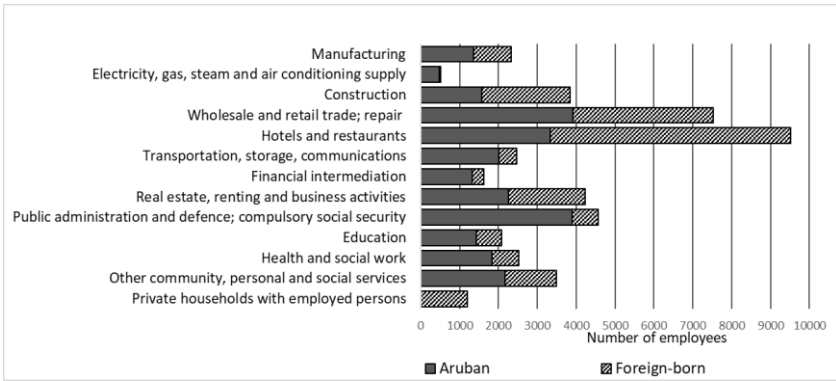
> *"In general, nearly 3 out of 4 MMAs (Main Migration Actor, AA) (74.5%) indicated feeling happier living on Aruba than before they moved to Aruba. In total, 90.4 percent of MMAs indicated they were satisfied with all areas of their life, and the greater majority (81.6%) indicated they did not feel discriminated against as a foreigner in Aruba. However, about 34 percent of MMAs reported that foreigners were not treated fairly by policies implemented by the Aruban government."* (CBS Aruba 2018a, p.5)

As a logical consequence of the influx of foreign labor, in Aruba and even more so in Sint Maarten, the proportion of locals to non-locals in the labor market has decreased. Their qualitative role also changed significantly.

From 1991 to 2000, the net employment increase in Aruba was 13,504 jobs, an increase of 48.1%. In contrast, the total number of jobs held by Aruban-born locals increased by only 18.5%. They occupied *fewer* jobs in construction and hotels and restaurants, and private households, but increased their employment in manufacturing, financial services, public administration health and social work and other community and social services. Although an absolute drop of Arubans employed in hospitality occurred, their number in the higher management, professional and technical levels *within* that industry went up, in a clear career advance of this group (CBS Aruba 2004, p.90). In the next decade (2001 to 2010), local workers only filled 7% of the new jobs in hospitality (CBS Aruba 2014, p. 13). By 2010, the proportion of local workers in the tourism industry had dropped to 35% (CBS Aruba 2014, p. 9) from 42% in 2000 and 63% in 1991 (CBS Aruba 2004, p.87). This illustrates that local workers shifted into different sectors, while also occupying higher income niches in the hospitality sector. These movements are summarized in Table 5.1.

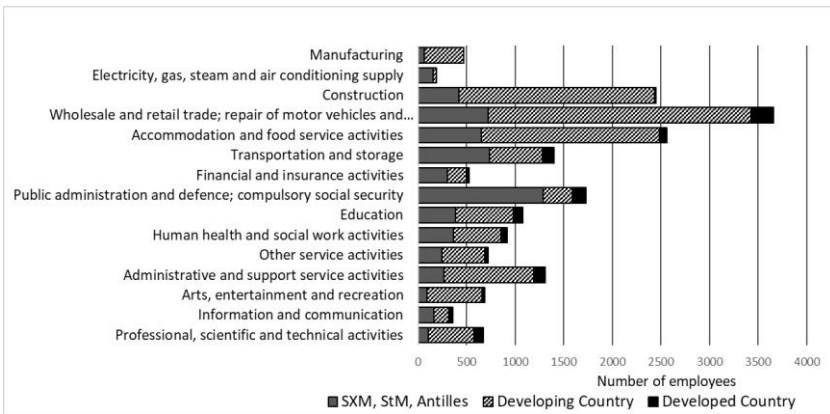
Sint Maarten (Figure 5.5) shows a more extreme picture than Aruba (Figure 5.4). If we define a 'local' worker as someone born in either Sint Maarten, one of the other former Netherlands Antilles, or Saint Martin, their total proportion of the labor force was only 31% in 2018. The remainder consists of persons born in a developing country (63%) or a developed country (6%) (Department of Statistics 2020a). The local group is clearly overrepresented in public administration, water supply and waste management, electricity supply, transportation and financial services and to some extent in education. Immigrants from developed countries work more than proportionally in real estate, in professional and technical activities, and in information and communication.

Figure 5.4. Aruba: employed population in selected branches of industry, by country of birth, 2010



Source: (CBS Aruba 2014, p. 9)

Figure 5.5. Sint Maarten: employed population in selected branches of industry, by country of birth, 2018



Sources: STAT Sint Maarten labor force survey 2018 (Department of Statistics 2020a)

In summary, we see labor market segmentation at work by – both in relative and in absolute terms - a net movement of local Arubans and Sintmaarteners out of the traditional growth engines of hospitality and construction and towards government and public services, financial services and real estate. At the same time, we see an upward movement of those who remain within the hospitality sector, and given the average income disparity, probably in other industries as well. Immigrants from developing countries fill the ever-increasing newly created

jobs in hospitality, construction and related industries, as well as the positions vacated by locals. Completing the picture, in both countries a small group of highly skilled immigrants from developed countries occupies several managerial and specialist positions.

This implies that although there is labor market mobility for each group of workers compared to their earlier situation, labor market segmentation between locals and immigrants remains with sectoral shifts among immigrants and locals.

A fourth aspect of the paradox concerns the additional income transfer mechanisms between the two groups, either directly from immigrants to locals, or via government channels that favor locals, some of which can be qualified as 'rent seeking'. Within the scope of this article, a limited number of indicative examples are given. A first example is the income flow from immigrants to locals through rent payments on apartments and other dwellings. The high population density puts an economic premium on creating additional living space and renting out apartments, especially in the 'grey' part of the economy. Indicative of this mechanism is for instance that, among families in Aruba who rent their living space, 14% is a local family, 27% are 'mixed' families, with local as well as immigrant members, and 66% of tenants are immigrant families (CBS Aruba 2004, p. 179). Since housing ownership is mainly local, this implies a large income transfer from immigrants to locals by way of rent. Figures from Sint Maarten for 2016 show that 56% of dwellings are 'dependent' and therefore rented, reflecting the high proportion of immigrants in society (Department of Statistics 2016).

A second example of rent seeking lies in the fact that many occupations and businesses are subject to government-issued permits and constitute semi-monopolies which can earn a high premium. Haan mentions procurement issues in large government projects, creation of monopolies through permits, offering government jobs, government medical insurance coverage for the poor, interest free loans and study loans as commonplace mechanisms of rent seeking and favoritism in all Antillean islands including Aruba and Sint Maarten (1998, p. 263).

A paradox explained

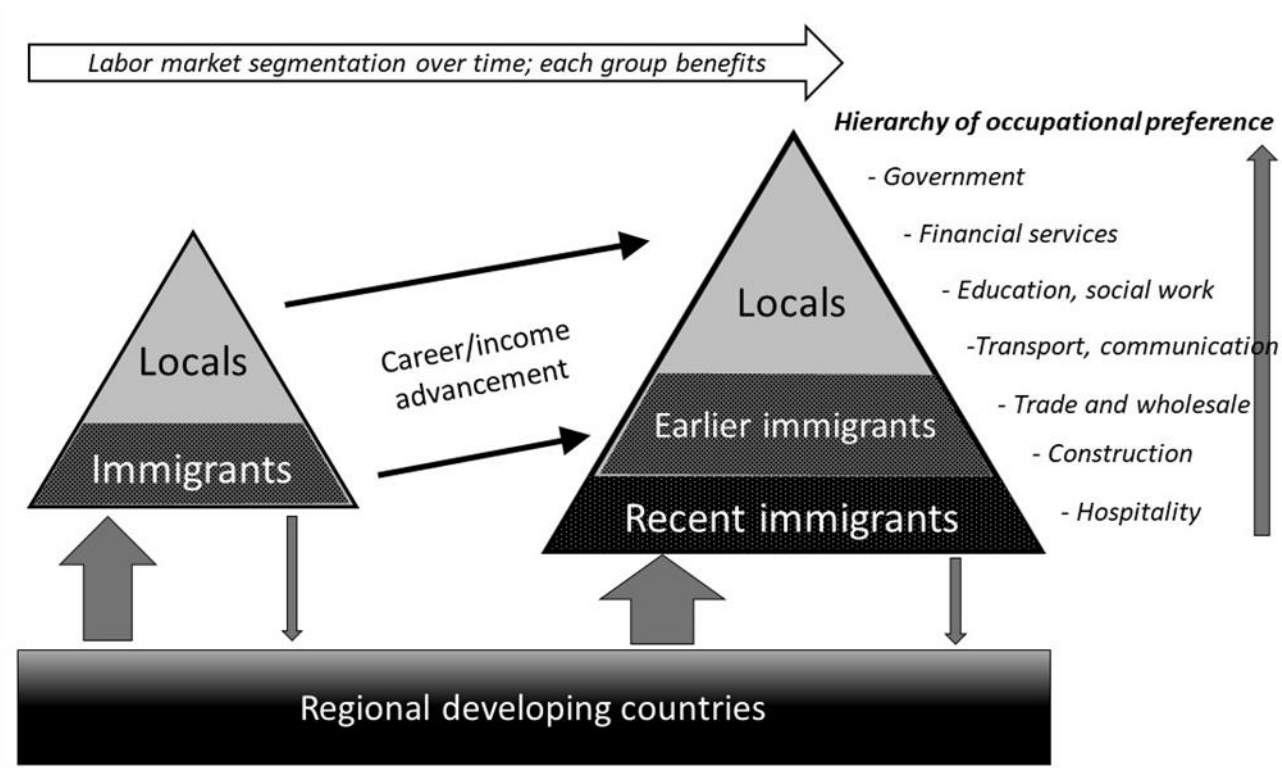
The four factors listed above explain how – in a continuously growing economy and labor market – the average productivity can roughly remain the same, while working people in each labor market segment still experience career advancement. In this way the SITE model turns out to be in the interest of most segments of the working population. By virtue of the ever-growing economy and labor force new space is created at the higher levels of the social pyramid for growth in income and social position for the local population and to some extent for 'earlier' immigrants. At the same time, additional lower skilled and -paid immigrant workers are continuously added at the base of the pyramid. This last

segment benefits as well in comparison to their starting point elsewhere in the region.

The key to explaining the paradox is that - while the average may remain the same – this average pertains to an ever changing and growing population. The existing workforce keeps moving up, while new low-paid workers are added, increasing the total workforce.

In conclusion, the arrangement is advantageous for practically everyone involved, provided that it grows. Continuously, new jobs need to be added at the base of the pyramid in order to create more opportunities in the higher layers. This explains the model's 'mandatory growth' and explains why SITEs keep aiming for economic growth in the absence of overall productivity and income gains (Figure 5.6).

Figure 5.6. A paradox explained; individual progress under continuous immigration



The contradiction between mandatory growth and limited island carrying capacity

The first part of the article explains several dimensions of a SITE development model and illustrates how continuous volume growth is a *mandatory* condition to sustain the model and offer continuous advancement to all groups involved. However, there are several factors related to carrying capacity of the islands, that make further volume growth highly problematic, which I discuss in this section. This immediately adds a contradiction to the paradox explained above.

First, the geographical dimension, as both islands have met the direct physical limits of their capacity to host tourists, which results in 'overtourism' or overcrowding. The pressure of increased population pushes the islands over other carrying capacity limits, as housing, infrastructure and public services are overburdened. Secondly, along the dimension of the tourism product, both islands have, for lack of modernization and upgrading, entered the stagnation phase, a situation that is compounded by the negative feedback on the tourism experience caused by the spatial constraints. Thirdly, along the demographic/time dimension, this model is unsustainable as it is dependent on a demographic 'windfall' of a population consisting in large part of immigrants in their productive years. These factors constitute underexposed characteristics that add depth to both the TALC and the SITE models. Below these are set out more in-depth.

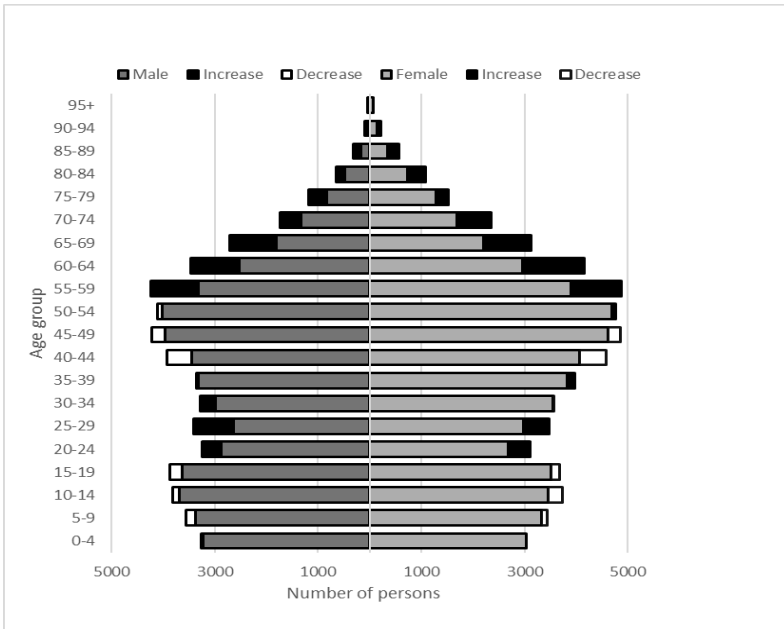
To begin with, awareness of the limits of the carrying capacity exists in SITEs and is documented. See for an overview of tourism growth in both islands over time and the management of carrying capacity, or lack thereof (Alberts 2020a). Viewed against the background of mandatory growth of tourism on both islands, reaching and transgressing the boundaries of carrying capacity seems almost inevitable. There are many instances in Aruba and Sint Maarten when the issue of exceeding the limits of carrying capacity was brought forward, and governments for at least two decades have paid lip-service to respecting these limits, with little noticeable effect (Alberts 2020a).

Second, the TALC theory shows that one particular tourism product mix typically cannot contribute to economic growth of a destination endlessly. The stagnation phase of the lifecycle is indicated by a lack of further growth of visitor numbers, the destination going out of fashion, gradual decrease of the quality and value added of the product, and increasingly negative feedbacks of the industry on the destination's social and economic structure (Butler 1980). Both islands seems to have entered this stage now, and unless new strategies lead to 'rejuvenation', a stage of 'decline' may set in (Alberts 2020a). The Aruban Central Bank concluded recently: "*The majority of the indicators analyzed suggest that tourism in Aruba has reached the stagnation stage. However, it does appear that the sector has not yet reached the tipping point from which it would start to decline*." (Pereira and Croes 2018, p.1).

Sint Maarten has seen no increase in stay-over visitors at all since 2000. Cruise visitor numbers meanwhile doubled (IMF 2019b, p.22), showing a clear shift in emphasis in this islands' tourism formula. Cruise visitors however over the years have tended to spend less per day, and increasingly aboard the ship as opposed to onshore, in a trend that has been evident since the turn of the century (TTCI 2005, p.105). Other qualitative criteria, such as notable environmental, social and economic problems have put Sint Maarten squarely in the stagnation phase as well.

Third, the large influx of labor – apart from being a necessary condition to tourism development - has certainly had favorable short-term macro socio-economic effects, for instance on the activity rate. In the last decade of the 20th century, among Aruban locals this rate dropped from 45 to 43.9%, while among immigrants from developing countries it increased from 55.1 to 66.3%, together bringing the national average from 46.0 to 49.2% (CBS Aruba 2004, p. 85). This reflects the fact that immigrants are mostly in their working age and are accompanied by fewer elderly and children than the local population. However, this situation is temporary and artificial. In the next decade, from 2000 to 2010, the overall activity rate did not increase any further, as a result of much lower immigration numbers (CBS Aruba 2017, p.62).

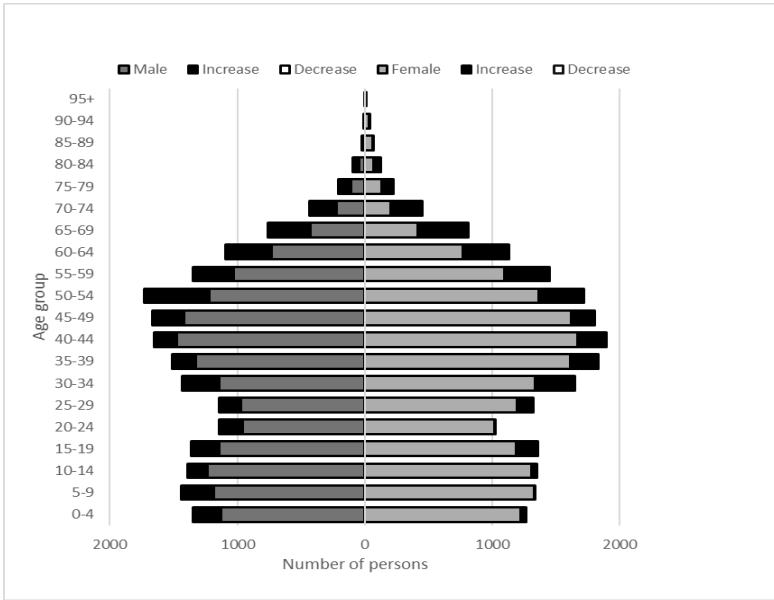
Figure 5.7. Population pyramid Aruba 2018 vs. 2011



Sources: 2011 (CBS Aruba 2012, p.7), 2018 (CBS Aruba 2018b)

Less specific numbers are available for Sint Maarten, but we know that the overall participation rate peaked around 1990 at 60% and stabilized around 58% in the census of 2011 (Department of Statistics 2019a). On both islands it is apparent that the positive effect of immigration on the activity rate (participation rate) has run its course[18]. Both islands have experienced a socio-economic 'windfall' over the past decades, with high participation rates that strongly reduced government expenditures in fields such as social security and health care.

Figure 5.8. Population pyramid Sint Maarten 2018 vs. 2011



Sources: 2011 (Department of Statistics 2020b), 2018 (Department of Statistics 2019b)

The reversal of this windfall is now visible for both Aruba and Sint Maarten in a very strongly constrictive (onion-shaped) population pyramid, characteristic of countries facing an imminent ageing of the population (Figure 5.7 andFigure 5.8).

Conclusion: a finite model based on mandatory growth within island limits

Based on the paradox and the contradiction outlined above, this article shows that several dimensions should be added to the Small Island Tourism Economy paradigm in order to understand their development through the tourism area life cycle, in particular during the mature stages. Building on the geographical and

[18] Following the data sources, all participation rates mentioned for Aruba and Sint Maarten are expressed as percentages of the total population, as opposed to percentages of the population of working age.

carrying capacity limits acknowledged by Butler's TALC and McElroy's SITE theory, an improved model recognizes several socio-economic dimensions. The SITE concept needs to be elaborated with the concurrent effects of stagnation in productivity, tourism volume growth and immigration, with a specific labor market segmentation between locals and immigrants. These factors taken together constitute a system that demands continuous volume growth to produce outcomes that are favorable to all groups concerned. The paradox between stagnant average productivity and individual advancement is clarified when we realize that the working population is continuously growing, supplemented by immigrants from lower-income countries.

The solution to this paradox answers the question why small island tourism economies keep growing while carrying capacity limitations and a lack of productivity gains seem to advise a different choice. All labor market segments indeed seem to gain from the segmented labor market, provided the economy and therefore tourism keeps increasing in volume. As a consequence, volume growth is a necessary prerequisite of the high-intensity SITE model. Therefore, as an extension to existing SITE theory, the apparent contradiction between stagnant average productivity and advancement of all labor market segments, explained by continuous growth and immigration, could be labeled the 'mandatory growth paradox'.

The paradox therefore has an explanation. However, it also gives the SITEs a fatal flaw. As their model needs continuous growth to keep producing the intended outcome for all segments of the labor market, SITEs are forced to progressively exceed the limits of their carrying capacity. This happens while in the TALC stagnation stage the tourism product already loses quality and market share, which is then compounded by the negative feedback from overpopulation, environmental deterioration, deficient infrastructure and weak governance.

The stagnation stage problems of SITEs are further complicated by the delayed demographic effects of previous immigration waves. This phenomenon is only sporadically acknowledged, and insufficiently recognized as inherent to the SITE model. A large influx of foreign labor made the TALC development and consolidation stages possible, while creating a windfall by positively distorting socio-economic and fiscal indicators as the active population increased far more than the inactive segment. In the stagnation phase, the opposite starts to happen. The earlier immigration cohorts now approach retirement age, while new immigration and natural population growth both decrease, setting the stage for a delayed 'demographic timebomb' characteristic of high-intensity SITE development.

Further research is advisable into labor market segmentation and other socio-economic mechanisms, in particular mechanisms of income transfer and

distribution that explain the particular growth dynamics in SITEs. This also applies to the delayed demographic effects of large migration movements on a small island. Furthermore, circular migration adds a geographical dimension that makes the SITE model significant as a regional growth- and employment node, rather than purely as an island development strategy. Finally, the mechanics of the 'stagnation' phase of the tourism life cycle and the factor that determine a prolongation of this phase, or a transition to 'decline' or 'rejuvenation' in SITEs have been explored in this article but merit further elaboration.

To find a way out of the 'mandatory growth' paradox within this finite SITE model will not be easy. It is certain that the inherently geographic limited carrying capacity of both islands will not allow much further volume growth of tourism, if only because it would deteriorate the product itself. Likewise, further massive immigration to solve the demographic transition would be counter-productive considering the already extreme population density. In any case, this would be an unlikely strategy since immigration is almost fully dependent on tourism growth, which needs to be slowed down, reversed, and qualitatively improved.

Time is running out for Aruba and Sint Maarten's SITE model. If no paradigm-shifting solutions are found that would bring rejuvenation in lifecycle terms, the combination of demographic and carrying capacity pressure, the end-of-lifecycle tourism product and a lack of productivity may send both islands into a downward development spiral that will lead both islands into the decline phase and will cause the collapse of a once successful island development model.

6. Conclusions

In this last chapter I come back to the main question of this thesis; namely,

> *How have governance and socio-economic factors contributed to the current unsustainable state of the SITE development model and its resistance to change in Aruba and St. Maarten? How can inclusion of these factors improve the descriptive and explanatory power of the SITE framework?*

Butler's Tourism Area Life Cycle (TALC) theory is a well-established and much built-upon theoretical framework of the evolution of tourism destinations, introduced in 1980 (1980). As the author indicates, the roots of the model were in geography (2006a, p.13), and build on earlier concepts of evolution of tourism areas. TALC proposes the characteristic S-shaped curve, which echoes the shape of the more general product-life cycle theory, and has become the model's trademark.

At the core of the TALC model are the five stages that lead to the top of the S-curve; exploration, involvement, development, consolidation and stagnation. The latter two stages however, bring a tourism destination to the limits of its carrying capacity. Sustainability of tourism development, in the environmental sense as well as in the broader sense of ability to maintain socio-economic levels, has therefore been an essential part of the TALC framework from the start. The model foresees a range of possible scenarios after the stagnation phase, from reinventing the product/market combination(s) to achieve 'rejuvenation' on the positive side, to a negative spiral of product weariness and carrying capacity limitations leading to 'decline'. From its inception, TALC was a cautionary tale regarding the limits of carrying capacity in tourism destinations, as well as offering a way out that implies an active governance model of public-private partnership (Butler 1980, p. 9). The carrying capacity message however, though theoretically widely adopted, has not led to the right actions in practice at a national governance level, according to the author of the model (Butler 1996, 283-293).

Tourism-oriented islands, being naturally limited geographical areas, appear to be obvious case studies for the TALC model. From the early 1990s onwards, McElroy and De Albuquerque, building on a simplified version of the TALC blueprint, started ranking tourism islands based on the 'Tourism Penetration Index', a benchmark composed of three different tourism intensity indicators (1998). This framework eventually evolved into the Small Island Tourism Economy (SITE) model proposed by McElroy (2006). As with Butler's life cycle model, the concern about the 'mature' stages of development and the limits of carrying capacity were a main element of the SITE model since the early stages of its development. In a 1992 study on Sint Maarten/St. Martin and Bermuda, Sint Maarten is considered,

perhaps prematurely, to be in the stagnation phase and on the threshold of decline (de Albuquerque and McElroy 1992a, p.15).

The SITE model is a member of a small family of 'island development' paradigms. Previous studies into Pacific, Caribbean and other islands resulted in the MIRAB model, for islands relying on migration, remittances, aid and bureaucracy, described by Bertram and Watters (1985; 1986). Other islands seemed to fall into the 'PROFIT' category proposed by Baldacchino (2006a; 2006b), driven by local jurisdictional autonomy in the fields of 'people, resource management, overseas engagement, finance, and transportation'.

The SITE model however, so far mainly offered confirmation that different islands in this group indeed fit the various phases of the tourism life cycle and expressed similar characteristics. In academic literature, however, there has not yet been extensive attention for the questions as to how and why islands follow this trajectory, and what determined their 'success' or 'failure' in doing so. This study addressed these questions.

After the 1992 UNCED conference, which formally linked environmental sustainability and development, islands were quickly recognized as a group that merits separate attention in the Barbados plan of action (United Nations 1994) and its successors. This gave rise to a body of literature on the topic of sustainable tourism on islands (Briguglio, Archer et al. 1996; Briguglio, Butler et al. 1996). This cemented the status of sustainability as a crucial concern, a topic that was in essence recognized earlier as central to the TALC model. Again, most literature on sustainable tourism in islands focused on adapting tourism products and strategies on islands, without explaining the dynamics of how unsustainable tourism developed or why it persists.

Numerically, most academic literature on tourism in islands is marketing-oriented. It explores the supply and demand relationships between destination and the economies of tourists' origin and observes these islands through the economic lens of competition, market share and securing tourism revenue. Some authors from this school have ventured into the mutual relationships between quality of life, tourism development and external shocks in Aruba (Ridderstaat, Croes, and Nijkamp 2013; 2016) and Robertico Croes' studies into an alternative approach to qualifying tourism development using Amartya Sen's capability approach (2012). The work of Sam Cole, an advisor to Aruban governments for decades, deserves special mention here, going beyond the economic modeling and life cycle frameworks to explore the cultural and ecological impacts on society (Cole 1997; 2007; Cole and Razak 2009). In most cases however, the internal dynamics of the society hosting tourism were not the main object of research. By and large, tourism is treated as a factor external to the tourism island, driving its

development, rather than the island generating its own dynamics and making use of, or reacting to, external opportunities and threats.

Finally, a sociology-oriented body of literature is dedicated to the impact of tourism on host societies (Sharpley, R. and Telfer 2002; Sharpley, Richard 2018). Again, the focus is mainly on problems stemming from the external impact of tourism on host societies, rather than on the dynamics of the host society itself, in reacting to, managing or influencing the tourism development trajectory.

The innovative contribution to the debate in this thesis is its focus on the role of governance and socio-economic dynamics in SITE islands themselves as factors explaining the development trajectories, which SITE islands follow. Despite the evidence that the limits of the SITEs' carrying capacity limits are reached (Cole and Razak 2003; TTCI 2004), while productivity and income levels have been stagnant for decades (Alberts 2016), the model still seems to be advantageous to large groups and therefore resistant to change. Exceeding the carrying capacity limits may lead to the collapse of the model and the islands slipping into the decline phase of the lifecycle. This raised the following question concerning future trajectories and policies needed to realize alternative pathways: What are the conditions of modification or revision the SITE model would have to fulfill, to prevent an imminent decline of the model? This question is addressed in the course of this chapter

In answering these questions, two SITE cases are researched. Aruba and Sint Maarten, both former island territories of the Netherlands Antilles, are now constituent countries of the same Kingdom and therefore share a non-independent constitutional status and common roots in their legislative framework. However, they shared no common policy agenda that helps explain the similarity of their SITE development trajectory, or the parallel outcomes thereof. Aruba and Sint Maarten are situated at opposite ends of the Caribbean basin, followed paths that diverged from the other four Dutch islands, and received more passive resistance than encouragement from the Netherlands Antilles government level. Without any coordination, other than some mutual inspiration, both case studies show remarkably similar developments and results, reinforcing the likelihood of the results of this study being relevant to other SITEs, particularly those of a high tourism intensity.

Socio-economic dimensions of the SITE model

The discussion of the SITE model and the development trajectories found in Aruba and St. Maarten were broken down into several sub-questions. The first sub-question addressed was:

> *What are the main socio-economic dimensions of the extreme SITE model present in Aruba and Sint Maarten? What do these dimensions mean for the vulnerability and resilience of the model?* [19]

The tourism development model evident in Aruba and Sint Maarten closely fits the characteristics of the SITE model. Even within the context of this model, both are extreme examples, consistently in the top 3 measured by 'tourism penetration index', SITE's central measurement concept. The question is then which dimensions of their development brought about this measure of SITE 'success'.

In these particular cases, the SITE model was contingent on very high levels of immigration that provide the necessary labor force. These regional movements of workers fit earlier patterns of migration in the Caribbean region, where islands are alternately supplier or receiver of regional labor, as industries develop and dwindle per island. This change of roles is known as 'migration transition'. As SITEs are by definition limited in their local labor supply, labor migration, which is largely one way, but to a certain extent circular as well, has to be recognized as an essential dimension of the model.

For this reason, conceptually 'SITE' can't be seen as an island development model only. It can exist only by virtue of available and accessible labor reserves in the surrounding region, and is therefore a regional development concept as well. This conclusion gains even more relevance in relation to the socio-economic resilience of the model.

The SITE model in the extreme form found on the islands is based on a 'monoculture' of tourism with an absence of any significant economic diversification to other sectors. Conventional economic development theory favors diversification from the point of view of risk spreading, which enhances resilience. However, this does not turn out to be directly applicable to SITEs. Diversification on a small island scale is not a practical option in light of limited capital and human resources. Moreover, tourism economies in the Caribbean and Latin America economically perform better than more diversified exporters in the region, and are less vulnerable to economic shocks.

SITEs have shown a remarkably high resilience to external shocks, which is another dimension of their model that contributes to the explanation of their 'success'. The capacity of absorbing shocks and 'bouncing back' relatively quickly appears to be caused partly by the embedding of SITEs in regional migration networks. Sudden economic downturns cause less unemployment than expected,

[19] The results of this inquiry were published in *International Development Planning Review* as "Immigration-dependent extensive growth in small island tourism economies: the cases of Aruba and Sint Maarten" (Alberts 2016).

as migrants opt to leave the islands as jobs opportunities disappear. This is another reason to view the SITE model as a regional system.

While investigating the socio-economic dimensions of high-intensity SITEs, they appeared to show a close adherence to the stages predicted by the TALC model. After a steep growth trajectory, they have quickly reached the stages of consolidation, followed by stagnation. However, essential to their 'success' in doing so was a constant high degree of immigration in order to supply the necessary labor force to islands with a limited population. This is a dimension of SITEs not explicitly recognized as essential in previous studies. In the stagnation phase, the quality of the tourism product leveled off or declined, as the TALC model predicts. However, deviating somewhat from the TALC model, the tourism industry volume and visitor numbers kept growing, albeit at a slower pace. Meanwhile, the immigration trends followed tourism volume. Real economic growth was therefore recorded year after year, suggesting the continued 'success' of SITEs. However, through immigration the labor force grew at the same rate as real GDP, which means real per capita GDP, an indicator for labor productivity, remained stagnant. This questions the perceived success of the model. In conclusion, this adds up to 'immigration-dependent extensive growth', which turns out to be an important newly recognized characteristic of the mature SITE model (Alberts 2016).

Explaining the resilience of the SITE model

The second sub-question addresses vulnerability and resilience of the SITEs:

> *How can its low vulnerability and high socio economic resilience be explained on macro and micro levels? What role do individual labor market strategies play? When it comes to vulnerability of the model, is there a distinction between shocks and stressors?* [20]

An extensive academic debate about resilience of developing countries and particularly of islands exists, distinguishing between vulnerability, the extent to which an external shock affects an entity, and resilience, the capacity to absorb a shock and to 'bounce back' (Briguglio 2004; Briguglio et al. 2009; Philpot, Gray, and Stead 2015). Dimensions determining the degree of resilience are goods, governance, macro-economic stability, market reform policies (meaning the degree of market competition and labor productivity), social cohesion and environmental management. Generally, export concentration in a small range of goods ("monoculture") is considered to generate vulnerability. However, this rule

[20] Answering these questions was the aim of the article 'Resilience and Tourism in Islands: Insights from the Caribbean' (Alberts and Baldacchino 2017) published in *Tourism and Resilience*, a collection edited by Richard Butler.

does not seem to apply to tourism-focused islands, especially if visitors originate from different countries and regions (Croes, Robertico R. 2000, p. 67-74; Ridderstaat 2015, p.312). An important recent development in the tourism-vulnerability debate is the distinction between shocks and stressors (Calgaro, Lloyd, and Dominey-Howes 2014). The concept of 'stressors' refers to slow-moving long-term detrimental factors that affect a society over time, which covers the factors caused by exceeding the limits of carrying capacity, thus linking back to the situation of SITEs in the latter stages of the TALC model. While SITEs may not be particularly vulnerable to shocks, the same may not be true for stressors.

In defiance of the rule that diversification is needed to reduce vulnerability, SITEs are an example of extreme specialization which achieves the same goal. This strategy is described in island literature with the term 'speciation' – borrowed from evolutionary biology by Bertram and Poirine (2007) and further elaborated by Baldacchino and Bertram (2009). Speciation combines overall concentration on one product with a high degree of internal flexibility and adaptivity to changing circumstances. The rationale of this choice is that the limited resources of an island do not permit diversification, making the concentration of human resources and institutional infrastructure with the objective to excel in one sector, the best choice. In the case of SITES this translates into strategies like market diversification – the countries of origin of tourists - and responsive product development within the tourism sector. Speciation also promotes resilience, for instance through highly developed marketing strategies – focused on the chosen product of speciation - to mitigate the effects of external shocks. In conclusion, speciation – thus far described as an island strategy in general terms - should be recognized as an important characteristic of SITEs (Alberts 2016).

Literature dedicated to the question of how SITEs achieve their internal adaptability and flexibility in their process of speciation is very scarce, however. This thesis set out to find explanatory factors of resilience of SITEs in labor market and migration mechanisms. In doing so, a link was made to the concept of 'occupational multiplicity' introduced by Comitas (1963) based on research into labor market strategies in Jamaica. The research based on this concept was done in cooperation with, and inspired by ideas brought forward by island development and labor market specialist Godfrey Baldacchino (Baldacchino, Cassar, and Azzopardi 2019).

At the macro level, circular migration is an important driver of resilience. In the wake of sudden economic downturns immigrants return to their home country, either spontaneously or promoted by government, cushioning the socio-economic impact of large shocks. At the micro level, circular migration is part of a larger set of strategies employed by households and individuals that provides resilience to the economy. Workers have a high degree of horizontal flexibility - number of jobs or hours worked - as well as vertical flexibility - moving between

more or less preferable jobs, depending on available opportunities. Occupational multiplicity plays a role, the tendency to work different jobs at the same time, out of necessity or choice. Evidence from earlier (growth) stages of SITE development suggest that local residents often worked two jobs, in a situation of absolute labor scarcity in a fast-growing tourism economy, when immigration did not yet keep up with labor market demand. In the present phase, this thesis found the following individual labor market strategies, characteristic of SITEs and their labor market segmentation between locals and immigrants (Alberts and Baldacchino 2017, 150-162);

i. *'sound basis'* combination: the preferable combination is one based on a permanent job with the government or with another employer that is perceived as sound and secure. This job is often supplemented with a white-collar type service business. Renting out apartments is another important source of additional income. Locals are overrepresented in this group.

ii. *'formal/informal'* combination: a permanent or temporary formal job with a reliable employer, in order to secure the socio-economic basics like medical insurance or, in the case of immigrants, work and residence permits. In some cases, the primary source of income is a sole proprietorship or other business form. The primary job may be at the middle to lower levels in the hospitality industry or other services, like security or a qualified construction job. Next to this first job, secondary sources of income are sought, often in the informal sector. This can be a part-time in one of the skilled services already mentioned, a cottage industry or other services that are time-flexible. In this category are relatively many earlier immigrants who succeeded in gaining a firm economic footing. The high cost of living however makes one job insufficient to secure a good family income.

iii. *'opportunistic' combination:* a more fluid situation is found at the base of the social pyramid, where workers juggle several part-time and full-time formal or informal jobs. Of all respondents, one third fall in this category. Generally, these jobs are not permanent, and there may or may not be a full-time contract among them. Most of this category concerns unskilled labor such as hotel or private-home housekeeping, gardening, delivery jobs, low-skilled construction jobs or work as a security guard. This category is almost exclusively made up of (recent) immigrants.

Importantly, foreign workers considered remigration a fallback option on a continuum with the options described above. This underlines the fluid internal situation in the SITE labor markets, which depends on a high degree of worker

flexibility that can quickly accommodate seasonal changes in demand, changes in the tourism product, labor demand surges like the construction of new resorts or demand slumps in case of external economic shocks. This flexibility is additional to the external flexibility stemming from the – partly circular - migration link with countries in the region, from where labor can be attracted when needed, or returned to in an economic downturn.

This internal and external labor market fluidity is a previously underexposed, yet important factor in explaining SITE growth, as well as their socio-economic resilience (Alberts and Baldacchino 2017). As it was observed in three of the most intensely developed Caribbean SITEs, Aruba, Sint Maarten and St. Croix (US Virgin Islands) it should be considered a fundamental factor to the model.

Governance capacity in SITEs

The third sub-question concerned the governance dimension:

> *How did the governance framework of Aruba and Sint Maarten influence the SITE development of each island, analyzed in phases following Butler's TALC concept? In particular: When and how did governments and other actors acknowledge the islands' limits to their carrying capacity, and how did they react to this?* [21]

The answer to this sub-question draws on the governance school of thought of which Torfing is an important representative (Torfing and others 2013). Furthermore, the island development paradigms mentioned earlier (MIRAB, PROFIT, SITE) each imply a certain set of governance choices and strategies. A significant body of literature is dedicated to island governance choices, often in relation to vulnerability and resilience (Baldacchino 2010), or to achieving sustainable tourism (Briguglio, Archer et al. 1996; Briguglio, Butler et al. 1996). This includes both vertical as well as horizontal governance networks in which such SITEs participate. The vertical governance dimension of the Dutch islands, including the SITEs Aruba and Sint Maarten, in particular their constitutional relations within the Kingdom of the Netherlands have been studied extensively, sometimes in comparison to other non-independent jurisdictions (Oostindie and Klinkers 2003; Oostindie 2006). The horizontal internal workings of governance in the Dutch SITEs, however, have been the subject of far less academic research, with the notable exception of Haan (1998) where it concerns institutions and 'rent seeking' and recently Roitman and Veenendaal on the topics of small-island political processes (Veenendaal 2013; Roitman and Veenendaal 2016;

[21] These questions constitute the topic of the article 'Governance of island carrying capacity and vulnerability through the stages of the tourism area lifecycle' submitted for publication in 2020 (Alberts 2020a).

Veenendaal 2016). These authors inspired important avenues of research in this thesis.

There is hardly any specific literature analyzing the governance aspects of how SITEs move through the phases of the TALC model. The question as to the crucial governance mechanisms and choices that explain the SITEs' trajectory, in particular when confronted with the limits of their carrying capacity, is a central gap which this thesis has tackled (Alberts 2020a).

In the SITEs researched in this study, the role of government in shaping the earlier stages of the life cycle was to a large degree passive. Even though tourism development was an explicitly stated goal, no particular strategies were discernable apart from a laissez-faire attitude, and creating favorable conditions for foreign investors who therefore made most of the – unplanned – choices in developing the SITE model. In contrast, an active attitude did exist from the early stages towards creating certain crucial infrastructure, such as harbors, airports and utility companies, as well as promoting the islands in overseas markets to attract tourists. Even then however, there was a stark contrast between government efforts in realizing tourism-crucial infrastructure on the one hand, and the quality of roads, utility networks and other facilities serving the general public, on the other hand.

Remarkably, SITE governments have in fact recognized their countries' carrying capacity issues as of the 1990s before consolidation gave way to stagnation (Alberts 2020a). In this phase, concerns arose within the business community and civil society, while environmental pressure groups came into being. Government-commissioned public dialogue and research took place and policy advice was produced, but this did not lead to a marked change in government policy (Cole and Razak 2003; TTCI 2004). In practice, the focus remained short term; preserving visitor numbers and the competitive position vis-à-vis other islands. In TALC terms, therefore, in the 21st century consolidation gave way to stagnation, a phase that has been dragged out without effectively addressing the risk of slipping into the decline phase.

As a consequence, the SITEs' tourism product developed according to the stages predicted by the TALC model; starting out with hotels at a high level of exclusivity, quality and price, and a subsequent gradual decline. This is illustrated by trends like a decrease of brand-name hotels, a shift towards time-share, the increase of cruise tourism relative to stay-over tourism, and the advent of the all-inclusive product.

A conclusion of this thesis is, that up to the development stage of the lifecycle, the weakness of governance in SITEs was disguised by the success of rapid growth and justified by a 'laissez-faire' ideology. The investment climate was promoted

on the one hand by the absence of a strong regulatory or enforcement framework, and on the other hand by the fact that the judiciary was guaranteed by the Kingdom framework. However, a tipping point was reached in the consolidation phase, when the limits of carrying capacity manifested themselves. What was once ostensibly a strength now became a weakness. SITEs did not just reach the limits of their carrying capacity; the mere volume of their economies exceeded their governance capacity as well. They lacked sufficient governance strength to confront the triple challenges of managing the requirements of the ballooning economy and society, navigating the limitations of their carrying capacity, and adapting or upgrading the tourism product itself. Along the timeline of the TALC therefore, the same governance characteristics that were conducive to SITE development at first, became a liability in the consolidation stage and beyond.

In the vertical governance dimension, the SITE development has proven to be disruptive to the constitutional framework. As the two case studies of this research show, the Netherlands Antilles gradually dissolved, mainly driven by the divergent development trajectories of Aruba and Sint Maarten.

Vertically, the relationship with the Kingdom reached a certain tipping point as well in the consolidation phase. At the outset, being – part of - a non-independent jurisdiction was an important contributing factor to SITE success, as the legislative and judicial framework, backed up by the Kingdom guarantee function contributed positively to the investment climate. Meanwhile, in the early stages tourism development was recognized at the Kingdom level as an opportunity for the islands and encouraged as well as financially supported.

However, when the governance shortcomings in both islands became evident in the consolidation phase, the relations within the Kingdom became more tenuous as well. This led to a long period of tension with respect to good governance, government finance, and the constitutional framework, that lasted from the 1990s to the present day. This development coincided with the process of dissolution of the Netherlands Antilles constitutional level, and the search for new workable Kingdom relations, which continues to this day (Alberts 2020a).

In conclusion, the specific governance characteristics of SITEs were conducive to growth in the first stages of the TALC, and the same factors account for the later stage governance problems. Both in the horizontal and the vertical levels, the governance issues reached a tipping point at the same stage. Horizontally, the 'laissez-faire' attitude, with government providing only the most essential of conditions for tourism development, worked very well at first. Vertically, the Kingdom played an encouraging and supporting role in SITE development, while the tension within the Netherlands Antilles framework grew, but was still tenable. However, as of the consolidation phase, the SITE model clearly outgrew

governance capacity in the horizontal plane, while the divergent development tore the Netherlands Antilles' structure apart, and concerns about 'good governance' caused permanent tension within the Kingdom.

This historical - horizontal as well as vertical - governance dynamics along the TALC curve is an important addition to the SITE model, brought forward by this study.

Notwithstanding the failing governance dynamic in the consolidation and stagnation phases, governments did in fact recognize the carrying capacity limits and other factors making the SITE model inherently finite. Action was not taken however. This leads to the final question of this thesis: why SITE governments did not act on this knowledge, and remained stuck in a drawn-out stagnation phase.

Labor market segmentation and the mandatory growth paradox

The fourth and final sub-question pertained to the persistence of an ostensibly finite model: Why does a SITE model that is in a phase of stagnant productivity and lacks average income growth, go unchallenged and unchanged? What explains the perceived 'success' of the model and the reluctance to slow down tourism growth or modify its characteristics? [22]

Since 1980 Butler's TALC model has been extensively elaborated and applied to destinations in general and to islands specifically, whether or not using the 'SITE' framework. Life cycle studies however, generally focus on the applicability of the phases of the model, carrying capacity problems, relations to tourism markets and their governance (Butler 2006b; 2010). The socio-economic dynamics of the societies in question, the role of immigration, labor market mechanisms, or income distribution are usually outside their scope. The object of study usually is the management of the tourism product, not so much the development paradigm of the destination in question.

The environmental sustainability and vulnerability/resilience debates, when applied to tourism islands, each add valuable dimensions to describing the SITE development, but are to a large extent externally oriented as well. These concepts generally do not contribute to understanding what drives SITEs forward internally, or what makes them resistant to change.

This thesis draws attention to the internal socio-economic processes of SITEs, which were considered to be essential to the understanding of the particular SITE development trajectory. In developing into SITEs, the islands in question relied on high numbers of immigrant labor, which in turn led to a specific labor market segmentation. This phenomenon as such was not found in academic literature,

[22] An article investigating these questions entitled 'Labor market segmentation and the mandatory growth paradox in Small Island Tourism Economies' was submitted for publication (Alberts 2020b).

although the 'migration transition' – going from being a net supplier to a net recipient of immigrant labor - was recognized by McElroy and de Albuquerque (1988) as a characteristic of some Caribbean islands, SITEs included.

The specific view on labor market segmentation in SITEs brought forward by this thesis was inspired by the seminal study 'Double or Quits' published by the Aruban Central Bureau of Statistics in 2004, in which some fundamental questions were explored about the economic sectors immigrants come to work in, and equally important, which sectors locals preferred and moved into (CBS Aruba 2004). Though not recognized under that name in this study, the phenomenon described here is academically known as 'labor market segmentation'. This describes a situation of non-competing groups, in which groups in the lower strata are limited in their access to the higher strata of jobs on grounds other than skills and qualifications, for instance based on contractual status (permanent/temporary), on belonging to the formal or informal economy, or on personal characteristics such as gender or immigration status (ILO 2020). This phenomenon is primarily described in industrial societies. Labor market segmentation theory is itself a composite of 'dual labor-market' and 'internal labor market' theory. In its modern form it has its roots in the 1960s studies of Peter Doeringer and Michael Piore on the US labor market (Doeringer and Piore 1970) that led to the landmark study of Piore and Sabel (1984). In the European context, the research by Loveridge and Mok was groundbreaking (1979). These theories argue that labor migration to industrial economies is driven by pull- rather than push-factors, which constitutes one of the drivers of segmentation in the receiving economy. This concept seems highly applicable to SITEs.

In addition to labor market segmentation, the social stratification and resultant income (re)distribution within the islands' system can be explained to a certain extent by issues of 'rent seeking'. Rent seeking is a phenomenon originally associated with either monopolies or government, but later on was expanded to cover any behavior by an entity to gain wealth without an equivalent reciprocal contribution of productivity (Krueger 1974; North 1987). Rent seeking is closely linked to already wealthy groups securing inequality in their favor (Stiglitz, Joseph E. 2013), and is related to inclusion or exclusion of immigrants. Haan (1998) has explored mechanisms of rent seeking in the former Netherlands Antilles from the 1970s into the 1990s.

Since the stagnation phase, the SITE model manifests a paradox between the failure to produce further average productivity and income growth, and the ability to still produce favorable outcomes for most or all groups in the labor market. This paradox can be explained by an analysis of labor market segmentation. Based on continuous tourism volume growth, new immigrants were recruited to take up lower-skilled and -paid positions at the base of the labor market pyramid. By moving beyond regional low-income countries to the SITEs, these groups realized

an important improvement in their incomes. Economic growth and addition of immigrant labor in less-preferred sectors and positions created space in the higher strata of the labor market for locals and earlier immigrants into which to move (Alberts 2020b).

In the SITE labor market, several mechanisms contributed to segmentation. In terms of branches of industry, locals moved out of the economic core of hospitality and construction sectors and into government, financial- or other services, and education. They also on average moved into higher employment positions. Earlier immigrants had growth opportunities as well, generally following the same preferential hierarchy as locals. New immigrants were almost exclusively recruited into jobs in the lower rungs of the hospitality and construction sectors. The solution to the paradox is therefore, that all existing participants in the labor market generally move up, while the base is supplemented with immigrants from lower income countries in the region. Members of the latter group did advance their position by migrating to the SITE economy, but at the same time caused stagnation in the average income and productivity in the SITE labor market. So by virtue of continuous immigration and segmentation, each group indeed improved its position, while the national average remained the same.

However, this paradoxical SITE characteristic of all groups advancing while productivity stagnates is contingent on permanent growth. Without volume growth of visitor numbers and tourism resorts, the engine of the SITE economy, there cannot be an increase in opportunities in the higher strata of the labor market either. We therefore call this the 'mandatory growth paradox', adding an important analytical dimension to the SITE model (Alberts 2020b).

As the mandatory growth paradox was beneficial to almost everyone, governments were unable to slow down volume growth without compromising the social and economic opportunities for most groups in society. Theoretically, halting volume growth while still increasing opportunities and income would have been possible by restructuring the tourism industry in a way that would increase average productivity. However, such a strategy would require a level of governance capacity and vision that has not been in evidence yet. Consequently, the SITE model remained stuck in 'mandatory growth' mode.

'Mandatory growth' clashes with the limits of carrying capacity, and therefore builds an inherent contradiction into the SITE model. The model is clearly finite for a number of reasons.

In an island setting, the purely physical limitations are self-evident. This makes visitor number growth finite as well; high-intensity SITEs have generally used all their available beaches for resort development. The population growth following

the economic expansion gave SITEs extreme population densities. Furthermore, the natural environment came under industrial and population pressure, which in turn fed back negatively into the tourism product itself through pollution and deterioration, compounding the 'stagnation phase' problems. Socially and culturally, SITES were dually influenced; first of all by the dominant tourism industry and secondly by the resulting immigrant influx that completely overturned the population composition. Infrastructure development, outside the core necessities of the tourism industries such as harbors and airports, did not keep up with population growth, nor did services such as health care, education and public utilities. Crucially, the institutional framework, including governance capacity, has clearly shown not to be able to cope with the quantitative and qualitative tasks of the consolidation and stagnation phases of the TALC. These combined factors illustrate the carrying capacity limitations of SITEs and underscore the risk of stagnation turning into decline, as warned against by the life cycle paradigm.

The factors mentioned above constitute the classic components of carrying capacity. However, as this thesis shows, SITEs are confronted with the additional threat of a 'demographic time bomb'. Decades of high immigration in the development and consolidation phases skewed the population composition in a positive way as far as productivity is concerned, increasing participation rates and lowering dependency ratios. This means government tax income grew, while the immigrant population at first had only a modest influence on education and care costs, the largest components of government budgets. This created a socio-economic and fiscal windfall for SITEs, while in reality the demographical future of the model was mortgaged. Again, a tipping point was reached in the stagnation phase. As distinct 'onion-shaped' SITE population pyramids now show, the earlier immigration cohorts approach retirement age, while new immigration has slowed down by virtue of lower tourism volume growth. This effect is compounded by the modest fertility rates of middle-income countries, to which the SITEs now belong. Demographics are catching up with the SITE model as a wave of ageing population is imminent.

This 'demographic time bomb' is a new dimension to be recognized as a characteristic of high-intensity SITEs (Alberts 2020b). Its effects deepen the unsustainability of the model. It means that even if, theoretically, the stagnation phase could be stretched by halting further volume growth and bringing previously mentioned elements of carrying capacity transgressions under control, SITE governments would still be faced with the enormous challenge of a rapidly ageing population.

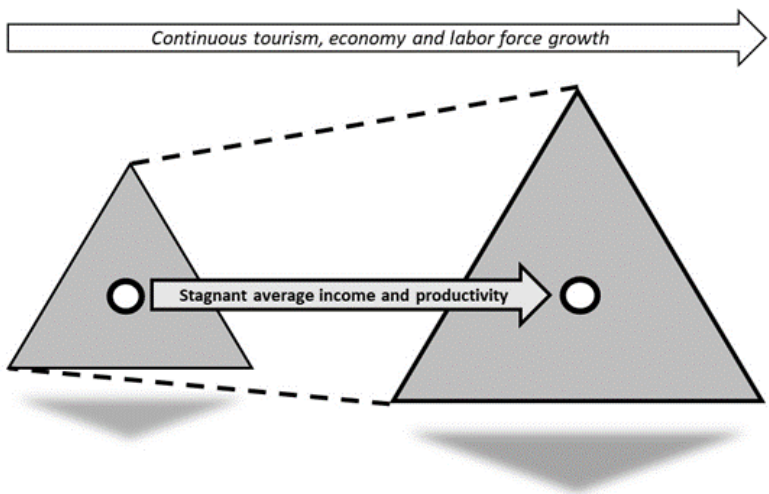
Reworking the analytical framework

Coming back to the main research question concerning the analytical framework of the SITE model, the main conclusion is that a number of dimensions need to be added to this model to increase is descriptive and predictive value. These new elements pertain to the internal socio-economic and governance dynamics of SITEs that help explain their TALC trajectory. Most SITE studies so far comprise macro-economic or marketing oriented studies of the tourism product, questions of environmental sustainability, or the islands' vulnerability and resilience in relation to global economic developments or climate change. Often, the TALC theory is used to classify SITEs, but the question what makes SITEs move through the lifecycle, or how they behave in its latter stages, is seldom asked. This thesis seeks to fill in this gap, by proposing the following SITE dimensions.

Extensive growth

In the mature stages of the TALC, SITEs continue to show tourism volume- and therefore economic growth. However, immigration numbers match real economic growth, resulting in an absence of productivity gain, making extensive growth a characteristic of latter-stage SITEs (Figure 6.1). This observation gives rise to the question *why* SITEs continue to grow in the face of stagnant productivity.

Figure 6.1. Mature SITEs show a paradox of persistent volume growth with stagnant average productivity



Continuous and circular migration makes SITEs a regional system

High-intensity SITEs can only grow by virtue of continuous high immigration numbers, as the islands have a limited resident population. This makes SITEs dependent on a supply of labor from low-income countries in the region. Migration is one-way as well as circular and serves as an income source for immigrants and their countries of origin. Socially and economically therefore, a SITE is a node in a regional system rather than only an island development model.

Speciation limits SITEs' vulnerability

SITEs are extremely specialized in one – export - product. However, rather than monoculture leading to vulnerability, intelligent and flexible specialization or 'speciation' limits vulnerability and lends resilience to SITEs. In a situation of limited human resources and diseconomies of scale, diversification is not a viable option. Active marketing of the SITE tourism product spread out over various regions in the world and a high degree of adaptability of the product contribute to successful speciation.

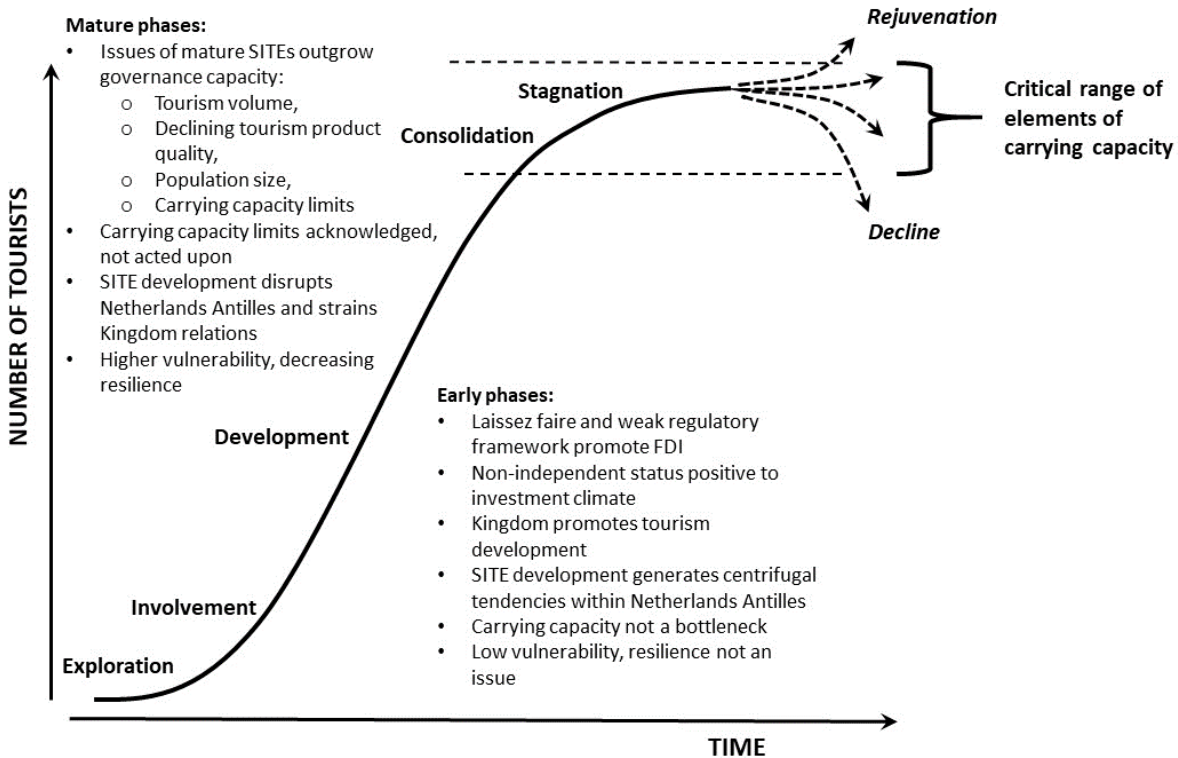
Individual labor market strategies increase SITEs' resilience

In the SITE labor market, a range of individual labor market strategies lends a high degree of flexibility to the workforce. Workers and households routinely combine different jobs and occupations, permanently or temporarily, in the formal or informal sectors, resembling the concept of 'occupational multiplicity'. A hierarchy of strategies exists, with locals more often occupying secure and white-collar positions and recent immigrants starting in the lower strata of the labor market, prepared to leave the island if opportunities are lacking. This phenomenon gives the labor market a high degree of flexibility as economic growth can be easily accommodated in the short run by a higher deployment of existing labor, while a downturn will result in dispersed underemployment or return migration rather than in unemployment.

Horizontal governance: limited government role is conducive to TALC growth trajectory, damaging in mature phases

A limited government regulatory role in the early TALC phases, supported by a 'laissez-faire' ideology, contributed to a favorable investment climate. Government limited itself mainly to crucial tourism oriented infrastructure and marketing. Since SITE growth is mainly based on foreign direct investment, this successfully attracted overseas tourism investors. This same characteristic became a liability in the mature phases of the life cycle. A tipping point was reached during the consolidation phase (Figure 6.2) when the volume of the tourism industry, the population and its needs, combined with the problems of reaching the limits of island carrying capacity, far surpassed governance capacity. This shortfall became manifest in the stagnation phase.

Figure 6.2. Crucial dimensions of SITE governance through the TALC; early



Source: Axes, curve, stages, carrying capacity based on (Butler 1980, p. 7) information about early/mature phases added by author

While the carrying capacity limits were recognized in the horizontal governance plane by industries, civil society and government, corrective action did not follow, leading to the risk of sliding into the decline phase. In SITEs, the same governance structure that favors the growth phases of the TALC becomes a liability in the mature phases of development.

Horizontal and vertical governance interaction in non-independent SITEs

The SITEs investigated in this thesis are non-independent island jurisdictions, which was a contributing factor to their investment climate, as the constitutional anchoring in the Kingdom and the independent judiciary were seen by investors as highly favorable factors. The Kingdom promoted SITE development with advice and financial support. However, when the horizontal governance structure reached a tipping point in the mature phases of the TALC and its weaknesses became apparent, this manifested itself in problematic vertical relations between SITEs and the Kingdom level as well.

Vertical governance: SITE development incompatible with island group governance

High-intensity SITE development is adverse to a federation-type governance structure with non-SITE islands. This is shown by the roles of Aruba and Sint Maarten within the framework of the Netherlands Antilles, the middle level of the original three-tier governance framework of the Kingdom of the Netherlands. While moving through the TALC stages, the two islands each generated increasing tensions within the Netherlands Antilles, contributing to the exit of Aruba in 1986 and the dissolution of the remaining Antilles in 2010. Though the historical, social and cultural roots of the centrifugal tendencies run deeper, the divergent SITE development became increasingly incompatible with island group governance, while SITEs developed the economic leverage to force an exit.

'Demographic time bomb', an additional dimension of SITE stagnation-phase problems

Carrying capacity limitations in the mature stages of development constitute a central element in the TALC theory, and are well described for SITEs. SITEs however, have an additional problem. Since their island model is immigration-dependent, high-intensity SITEs have gone through a period of rapid population growth to make their tourism expansion possible. In the TALC growth phases, this led to a demographically induced economic and fiscal windfall. Since growth mainly took place in the active segments of the population, tax revenues increased while costs of education, health care and other public services rose only moderately, while social security funds thrived. Participation rates were high and dependency ratios low. In the stagnation phase however, again a tipping point is reached. Immigration slowed down, while the earlier immigrant cohorts now

approached retirement age, illustrated by constricted 'onion-shaped' population pyramids. This will lead to high claims on social security funds, health care and other services, while tax and premium income will decrease. What was once a windfall now turns out to be a time bomb, a demographic challenge that will have to be confronted.

Labor market segmentation explains 'mandatory growth paradox'

Although the SITEs studied are clearly in the TALC stagnation phase, with the very real risk of sliding into decline under the combined pressures of carrying capacity limitations, tourism product decline, weak governance and an ageing population, tourism numbers in these islands keep growing. Although stagnation problems are acknowledged by governments as well as civil society, there is no indication that the fundamental characteristics of the SITE model are challenged to either rejuvenate the tourism life cycle or at least alleviate the carrying capacity pressures by halting volume growth. Furthermore, the failure of the SITE model to generate further productivity and average income gains does not lead to the conclusion that continued volume growth is pointless. This constitutes a paradox, an apparent contradiction between realization of the limits of the SITE model and failure to act upon this knowledge. To explain this paradox, the SITE labor market is investigated with the aim of elucidating why continuing along the current path is apparently still in everyone's -short term- interest (Alberts 2020b).

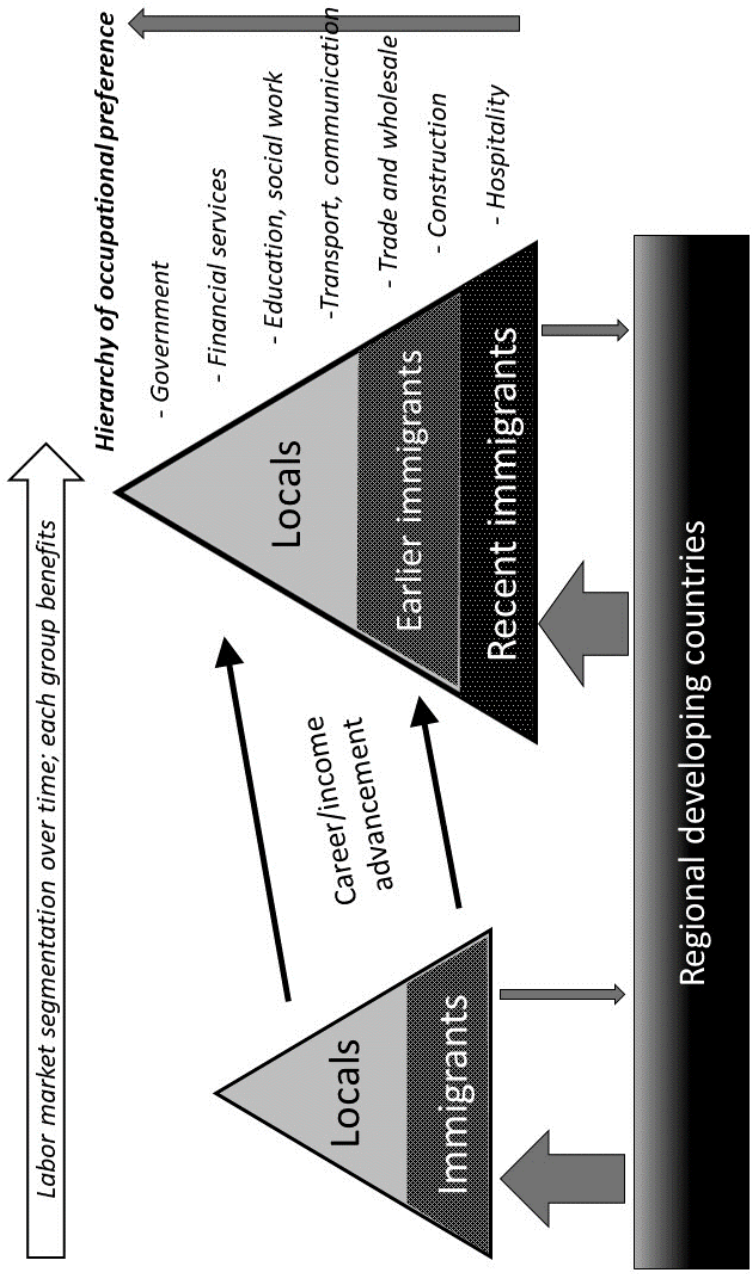


Figure 6.3. Labor market segmentation explains the 'mandatory growth' paradox

The answer to the paradox can be found in the way the labor market is segmented. Immigration takes place by almost exclusively recruiting labor into the lower rungs of the labor market, mostly low-skilled jobs in the hospitality industry and construction. Most immigrants come from low-income countries in the region, and therefore improve their quality of life by moving to a SITE. Continuous immigration accommodates continuous economic growth, which in turn creates additional opportunities in the middle and higher strata of the labor market. A clear segmentation pattern is discernible, in which locals move out of hospitality and into preferred sectors such as government and financial services, while earlier immigrant cohorts move up to the mid-tier sectors such as trade, transportation and certain other services. Similar movements take place within industries. Although locals on balance move out of the hospitality industry, they occupy an increasing number of management positions. Earlier immigrant cohorts perceive advancement opportunities as well. However, this segmentation and the accompanying movements can only persist as long as the entire labor market and therefore tourism, its economic engine, keeps growing. Only under this condition new above-average jobs can be continuously created, while adding new below-average work at the base of the pyramid. This dynamic labor market segmentation mechanism explains why a model that on average shows no productivity or income progress, is still beneficial to all segments – at least in the short term. Growth is therefore mandatory to the SITE model, giving rise to the 'mandatory growth paradox'.

In summary, a new SITE model with several added interrelated dimensions is needed to clarify the development of high intensity SITEs through the stages of the TALC. 'Speciation' helps to illustrate that a high degree of specialization, when executed in a flexible and intelligent way, can make islands less vulnerable without sectoral diversification, and actually add to their resilience, explaining a successful growth model. Large-scale immigration is an essential requirement for high intensity SITEs, which in the mature phases no longer correlates with productivity growth, translating into 'extensive growth', which in turn clashes with carrying capacity limitations.

The drive of mature SITEs to keep growing in spite of the finite nature of the model leads to the 'mandatory growth paradox'. This paradox can be resolved by observing the combined mechanisms of immigration and labor market segmentation, that offer all groups avenues of advancement, even when resulting in stagnant average productivity and incomes (Figure 6.1, Figure 6.3). The same elements of limited governance capacity that promote the SITE model's growth in the growth part of the curve, turn into a liability in the mature stages when the requirements of society grow and the tourism product's lifecycle wanes, putting SITEs at risk of sliding into the decline stage of the TALC.

Avenues of future research

Many elements of the SITE model elucidated here have only been the subject of very limited research so far and need additional work. Some of these topics probably have a high degree of relevance to other cases in the field of development studies as well.

The intersection of migration and labor market segmentation in SITEs – and probably other developing economies with a strong labor migration dependency - needs further attention. Labor market segmentation has not been a frequent object of research after the 1980s but should be revived and applied to SITEs and other Caribbean economies, where migration has always been a central phenomenon in socio-economic development.

Labor market segmentation is one important driver of social stratification and income distribution in SITEs. However, there are additional mechanisms as well, rent seeking being one. Rent seeking or acquiring income without significant contribution to productivity, often in relation to public policy and government-controlled markets is a driver of inequality (Stiglitz, Joseph E. 2013) and plays an important role in SITEs (Haan 1998). The concept ties in closely with the distinction between extractive and inclusive economic institutions brought forward by Acemoglu and Robinson (2013).

Rent seeking in turn has a strong relation to the quality of governance. The inadequacy of governance is an important theme in this thesis, and has thus far been researched mostly from the constitutional angle of Kingdom relations. Research into the different actors and institutions that play a role in the horizontal governance networks in SITEs is needed, firstly because of the crucial stagnation phase they find themselves in, and secondly because of the existing and new challenges of vulnerability and resilience the islands are confronted with, some of which are mentioned below.

Furthermore, in a globalizing world economy, national borders have become progressively less of an obstacle to production chains, and increasingly contentious to human migration. SITEs are at a large distance from their markets, dominated by foreign direct investment and are therefore examples of globalizing international production - and consumption - patterns. At the same time, SITEs constitute regional systems of labor supply, based on selective and partly circular migration patterns from nearby islands and countries. Being small, high production-intensity, labor-migration dependent states with a strong labor market segmentation, SITEs might be viewed as part of a family of small economies to which for instance some small oil-producing states in the Middle East belong as well, a perspective that could be studied further.

The concept of resilience, central to this thesis, has been heavily challenged in the 21st century by factors related to globalization. Climate change is an obvious example. By nature, islands are vulnerable to rising sea levels and disproportionally affected by hurricanes, as became clear when hurricanes Irma and Maria hit Sint Maarten in 2017. Islands in general, and SITEs in particular, cannot escape a fundamental reorientation of their economies in light of these developments. Combined with their already strained carrying capacity situation, research into the sustainable use of ocean, sea and coastal resources, in other words a 'blue economy' (World Bank 2017), seems necessary.

More recently, all established understanding of vulnerability and resilience of SITEs, or for that matter, all societies and economies worldwide, has been challenged by the impact of the Covid-19 pandemic. Though this pandemic is still ongoing at the time of this research, it is probably no exaggeration to state that thinking about sustainability, vulnerability and resilience will be profoundly and definitively changed. This pertains to island studies and SITE knowledge in particular, as through their comprehensive dependence on international chains of production, consumption and marketing, they are impacted disproportionally (Dukharan 2020).

Policy implications

Where do the SITEs go from here? Having explained how SITEs are trapped in a 'mandatory growth paradox' while in the full knowledge of the finiteness of their development model, the question arises whether there is a way out of their predicament. In TALC terms, a shift from 'stagnation' into 'decline' is imminent and would essentially mean a collapse of the SITE concept as we know it. At first sight, stretching the stagnation phase, as is arguably the case now, might be considered a viable scenario. We have to realize however, that the present phase contains intrinsic stressors that worsen over time, such as the environmental damage, the pressure on infrastructure and public services.

Even a complete halt to volume growth, such as a construction 'moratorium' scenario, without changing the essence of the model, would not be sustainable. Such measures might stabilize certain environmental and spatial impact factors, but even then, the slow demographic time bomb of the ageing of past immigration cohorts will continue to tick. The cost of health care, elderly care, and the social security system would rise in any such scenario and consequently government finance would be deeply impacted as well.

SITEs are therefore confronted with a triple challenge; a weary tourism product in the stagnation phase of its lifecycle, an island exceeding its carrying capacity limits, and the demographic consequences of past immigration. Furthermore, this

set of challenges is 'locked in' by the obligation to safeguard advancement opportunities in their segmented labor market by continuous volume growth.

It is easy to see how this combination of challenges could lead the SITEs to slip into the 'decline' phase. Any solution to prevent this will have to take all these aspects into account and will have to break the 'mandatory growth' paradox in the process. In TALC terms, the aim would be to enter a 'rejuvenation' phase through reinventing the tourism product, in the process probably catering for new markets as well.

As stagnant labor productivity is the entry point to understanding the SITEs problems, it also has to be the starting point of a solution. Labor productivity can only be increased by introducing different production processes, which in the case of tourism means services with a higher added value. The concept of 'speciation' mentioned in this thesis as an answer to the proponents of diversification, has to be rediscovered. Speciation as an island strategy implies the propensity to develop new skills, increase quality and productivity in a certain chosen niche, in this instance within the realm of tourism. In reality, SITEs have moved into the opposite direction; from exclusive, distinct, recognizable destinations in the 1970s and 1980s into generic suppliers of sun, sea and sand in the 1990s and the 21st century.

Reinventing the tourism product implies a radically different role for governments. As put forward in this study, there has hardly been any governance of the direction of the tourism development trajectory as such, the contribution of government consisting mostly of creating favorable conditions for investment and operations, complemented by marketing efforts – the last element with varying degrees of success. This was in line with the 'laissez-faire' philosophy prevalent during the SITEs' growth years. To achieve 'rejuvenation' however, active governance of the type of tourism products by selectively attracting investments and seeking out high quality products is a necessary condition.

As weak governance capacity is at the root of the finite character of the SITE model, solutions are out of reach if the institutional framework is not strengthened in the process. More capacity is needed to manage the character of the tourism sector and its product, as well as the existing carrying capacity challenges, while securing a sufficient quality of life for the population. This will take a new relationship between the main actors in the horizontal governance plane; government, business, NGOs and civil society. A parallel rejuvenation of the Kingdom relationships, that seem to suffer from a crisis of meaning and significance, could be a positive factor in this process.

SITE policies have by and large taken the relative resilience of tourism economies for granted. Their trajectory compared positively to non-tourism economies in the

region in terms of vulnerability to external shocks and their ability to bounce back from them. These certainties have been severely shaken by the recent Covid-19 pandemic. Concepts of vulnerability and resilience will have to be revisited, and the SITE model will have to become far more robust if it is to survive.

A way out of the mandatory growth paradox and towards rejuvenation cannot be limited to changes in the tourism product and -market alone. The social dynamics of labor market segmentation will need to be addressed too. Creating additional space in the higher levels of the social pyramid may have resulted in inflation of the non-hospitality sectors. The preference of locals and earlier immigrants alike, to move towards trade, financial and other service- or government jobs, may have resulted in a lower drive for efficiency and a resulting lower productivity in those sectors. Eliminating rent-seeking mechanisms and other barriers to competition will likely induce entrepreneurship and lead to increased efficiency, possibly freeing up labor for different, higher value-added activities.

Finally, increased labor productivity is generally dependent on increased qualifications and therefore on education of workers. In this respect as well, governments in coordination with the private sector will have to play a more active role in maximizing the potential of the available labor force. This applies to classic long term manpower planning, e.g. matching education output to labor market demand, but also for opening avenues of advancement, retraining and lifelong learning. This applies especially to immigrant groups, who may indeed be better off since leaving their homeland, but are not necessarily functioning at the level of their qualifications, nor have they always reached their full potential in educational attainment.

7. Epilogue

As with any research project, new developments arose while investigating, processing information and writing this thesis. Some external shocks had a profound impact on the islands observed and still have at the time of writing. However interesting and revealing, the timing was such that they could not all be incorporated in this work. At least two such events need to be mentioned in this postscript.

In September of 2017, the island of Sint Maarten/Saint Martin was struck by hurricanes Irma and Maria, the first one being the strongest hurricane in recorded Atlantic history, with a trajectory sending its center directly over the island. Many neighboring islands were severely hit by one or both hurricanes as well. The damage to Sint Maarten was by all accounts greater than that of hurricane Luis in 1995, so far the most devastating storm to hit the island. In the direct aftermath, great material damage was combined with mercifully few human casualties and an amazing degree of resilience of the population.

Nevertheless, as did hurricane Luis in 1995, Irma and Maria laid bare some of the specific characteristics and vulnerabilities of the Small Island Tourism Economy of Sint Maarten. At the best of times, many people who live and work on the island are undocumented and a large part of the economy is informal, a reflection of the SITE model and its weak governance structure. As an example, over the years a clear view on the number of inhabitants has never been reached. At the time of this disaster estimates based on data from the 2010 census arrived at a number around 50,000 while amazingly the number of officially registered residents was around 60,000. The lack of reliable data severely hampered impact and damage assessments as well as relief efforts, a situation further compounded by the obvious reluctance of undocumented residents to make their needs known to the authorities. In another example of the hurricane ripping the veil off the shortcomings of society, in some areas a structure built in accordance with hurricane resistance building codes would withstand the onslaught relatively unscathed while a building next to it would be utterly destroyed. These weaknesses notwithstanding, in early 2020 the tourism sector on the island had mostly recovered, with a few heavily damaged large resorts still in the process of being rebuilt or repaired. Cruise ship visit numbers were approaching pre-Irma levels again.

Overall, the hurricane Irma disaster confirmed SITE resilience, or at least the resilience of SITE tourism demand. In many other aspects, vulnerability was higher than it needed to be, and resilience did not quite bring the island back to the situation before. This seems to be parallel to the post-1995 development, when stay-over tourism declined in quality and only haltingly recovered in quantity,

while a shift towards cruise tourism took place. The lack of governance capacity and the socio-economic divisions were again painfully uncovered. Finally, despite the recovery efforts so far, and in spite of massive Kingdom aid, a debate about the qualities and future of the SITE model has not yet emerged.

An even more profound challenge to the SITE model comes from the recent Covid-19 pandemic. Starting in March 2020, Aruba and Sint Maarten have seen their export earnings reduced to almost zero due to the near complete suspension of international travel. It stands to reason that a global systemic shock like this would affect SITEs as well, but unlike other nations, SITEs are completely dependent on travel connections for their export earnings and are therefore disproportionally hit. At the time of writing, it is too early to gauge the medium- and long-term effects of this global health crisis. It is clear however that this crisis has an unprecedented socio-economic impact and will rapidly deplete government finances and monetary reserves. Due to travel restrictions, not even the customary return migration in times of crisis, characteristic of SITEs, can take place. Again, social divisions are painfully laid bare, especially in Sint Maarten, where most of the Covid-19 fatalities – a number higher than that of all other Dutch islands combined – are due to (undocumented) immigrants seeking medical assistance too late. Only Kingdom financial assistance stands between the islands and socio-economic freefall. It is as yet unclear for how long such assistance will be needed, what conditions will be set, or how far the willingness to offer support will stretch.

Even after the pandemic itself subsides, it is yet unclear what the 'new normal' will look like for SITEs or the economies that constitute their tourism markets, let alone for air and sea travel. Worse still, demand will probably be hit hard by the economic damage sustained by the US and other main SITE markets. Far more than the localized and supply-affecting hurricanes, the Covid-19 crisis will shake the SITE model to its core by affecting global demand as well as the logistical backbone of the tourism product. The era of cheap air travel may be over, and the effects on the cruise industry may be even more far-reaching. Even before Covid-19, cruise ships were hit by outbreaks of contagious diseases with some frequency, and this crisis may well challenge the entire business model of transporting thousands of passengers and crew over long distances while sharing amenities in a confined space.

The Covid-19 crisis uncovered SITE risks and vulnerabilities that were thus far unknown or at least heavily underestimated. It remains to be seen how this will affect the concept of 'speciation' that served the islands so well until recently. The urgency of the problems that already confronted the mature-stage SITEs is now compounded to a point that may force fundamental decisions about the future of the model. Unlike the aftermath of a hurricane, there is probably no status quo to return to. Circumstances rather than conscious decisions may dictate much of the

SITEs future. A lasting implosion of tourism demand for instance, may force the islands to continue on a much smaller scale of industry, economy and population, regardless of any policy decision. In that case, the Tourism Area Life Cycle may discontinue altogether for the SITEs and start over at a very different point, if at all.

The brightest scenario would be a transformation into a more robust, sustainable, and probably smaller scale model, made possible by a strong governance framework. In the absence of strong choices however, a prospect looms along the lines of the most negative of the post-stagnation life cycle scenarios, that of a catastrophic decline and a sudden conclusion to a once promising development model.

Appendix 1. List of expert interviews

All experts listed here have given permission to be mentioned as a source for the research comprized in this thesis and to be referenced in relation to research findings throughout the thesis. It was agreed with each expert that for any direct (literal) quotes from their interview, separate permission would have to be obtained. However, no such direct quotes have been used in this thesis.

Related to the development of Aruba

Ramsay Acosta, Director of the Volkskredietbank (non-profit social credit institution) in the 2000's and at the time of interview (March 2, 2016).

Sam Cole, economist, researcher, academic and advisor in the fields of tourism and economic development to governments of Aruba in the 1980s until the 2000s (December 9, 2015).

Maria Dijkhoff-Pita, Government of Aruba, Director of Economic Affairs, Commerce and Industry (March 1, 2016).

Henny Eman, former politician, prime minister of Aruba 1986-1989 and 1994-2001 (May 10, 2013).

Ewald Biemans, hotel manager and owner in Aruba from the 1970s until the present day (December 9, 2015).

Oscar Henriquez, politician in Aruba in the 1950s and 1960s, Netherlands Antilles Minister of Finance 1962-1963, Lieutenant Governor or Aruba from 1963-1972, director of a large trading company in the 1970s and 1980s (December 12, 2015).

James Hepple, hotel manager and tourism director in several Caribbean countries in the 1980s and 1990s, president and CEO of Aruba Hotel and Tourism Association (AHATA) in the 2010's and at the time of interview (March 4, 2016).

Sanju Luidens-Daryanani, chief marketing officer at Aruba Tourism Authority since 2011 and at the time of interview (March 3, 2016).

Jan van Nes, Aruba's Director of Tourism in the 1990s, hotel manager since the 2000s and at the time of interview (December 10, 2015).

Ryan Peterson, academic in the fields of tourism, economics and innovation in the 2000s and 2010s, Central Bank economic policy manager since 2015 (December 10, 2015)

Henk Timmer, (hotel) construction company manager and owner in Aruba and Sint Maarten from the 1950s until retirement in the 1980s (May 21, 2016).

Rik Timmer, Financial Director of a leading Aruban hotel and trading conglomerate in the 1990s until the date of interview (December 11, 2015).

Martin Vlietman, hotel and timeshare developer in Curaçao and Aruba (late 1960s and 1970s) and Sint Maarten (1980s and 1990s) (December 8, 2015)

Related to the development of Sint Maarten

Jan Beaujon, bank manager and director during the 1970s up to the 2010s, hotel manager from 1987-1992. Chairman of the Nature Foundation in the 2000s and 2010s (June 24, 2015).

Raymond Begina, partner at a large auditing and consultancy firm during the 1990s, 2000s and 2010s, joint coordinator of the Emergency Recovery Fund (ERF) after hurricane Luis in 1995 (June 12, 2015).

Russell Bell, general manager of several hotels in the 1980s and 1990s, tourism transport entrepreneur in the 1990s, 2000s and 2010s (June 30, 2015).

Tadzio Bervoets, director of the Sint Maarten Nature Foundation in the 2010s (May 13, 2015).

Jan Borsje, operational and general manager of several hotels and resorts during the 1980s, 1990s and 2000s (June 2, 2015).

May Ling Chun, hospitality operations, marketing and event planning official during 1990s, 2000s and 2010s, Director of Tourism 2011-2012 (June 22, 2015).

Clarence Derby, hotel manager from the 1970s until the time of interview (December 2, 2015)

Michel Deher, leading entrepreneur in the harbor, marina, transport, motor and construction sectors from the late 1960s until the time of interview (September 8, 2015)

Robert Dubourcq, manager of several hotels from the late 1960s until the 2000s, co-founder, chairman, executive director of the Sint Maarten Hotel and Trade Association SHTA from the 1980s until the 2010s (May 21, 2015 and July 16, 2015).

Michael Ferrier, hotel manager, entrepreneur in the automotive sector, airline official, politician (Island Council member and Commissioner of Island Territory Sint Maarten, Minister of Country Sint Maarten) from the 1970s to the time of interview (May 18, 2015).

Keith Franca, management positions in several hospitality enterprises during the 1980s, 1990s an 2000s, in the Sint Maarten Ports Authority in the 2000s, Director of the Sint Maarten Development Fund since 2012 and at the time of interview (May 13, 2015).

Richard Gibson, lawyer since the late 1960s, politician (Minister of Home & Constitutional Affairs of the Netherlands Antilles, Minister of Finance of country Sint Maarten), founder and (co-)owner of several companies, including an insurance company and a daily newspaper (May 22, 2015).

Keith Graham, managing director of the largest hotels since 1983 and at the time of interview (June 1, 2015).

Emil Lee, manager of a boutique hotel and a construction company since 1991, president of SHTA 2001-2014 (May 11, 2015).

Louis Peters, hotel manager in the 1970s, member of the mixed commission on the long term development of the Netherlands Antilles (Römer/Hoetink 1975-1980), co-founder of the Chamber of Commerce (May 19, 2015).

Clarence Richardson, labor union leader in Aruba from the 1960s until early 1980s, industrial relations consultant in Curaçao and Sint Maarten from the 1980s until the 2010s, member of the mixed commission on the long term development of the Netherlands Antilles (Römer/Hoetink 1975-1980), member of the social economic council of the Netherlands Antilles 1970s and 1980s (May 22, 2015).

Joe Richardson, politician in Saba since the late 1960s and Island Council member, Commissioner and civil servant in Sint Maarten in the 1970s, 1980s and 1990s (May 22, 2015).

Ralph Richardson, lawyer, Lieutenant Governor 1981-1982 (September 15, 2015)

René Richardson, labor union leader in the 1970s, politician in the 1980s and 1990s as Island Council member and Commissioner, member of the Social Economic Council of the Netherlands Antilles late 1970s and 1980s, chairman of the Social Economic Council of Sint Maarten in the 2010s (May 12, 2015).

Saro Spadaro junior, manager of one of the largest hotels since 2003 and at the date of interview (January 14, 2016).

Henk Timmer (see Aruba)

Martin Vlietman (see Aruba)

Russell Voges, Secretary of the Social Economic Council of the Netherlands Antilles 1980s and 1990s, Lieutenant Governor 1991-1994, Netherlands Antilles Minister of Constitutional and Home Affairs, Minister of Finance late 1990s and early 2000s (June 2, 2015).

Related to the development of the U.S. Virgin Islands

Albert Bryan, Former Commissioner of Labor USVI, former Chairman of the Board USVI Economic Development Authority (Government Development Bank) (April 26, 2016).

Frederick Joseph, Former Sub District Director United Steelworkers Union 1987-2010, in charge of US Virgin Islands (USVI) and Puerto Rico (April 25, 2016).

Appendix 2. Author's list of publications

Several chapters of this dissertation have been published or are currently under review at international journals:

Chapter 2:

Alberts, A. 2016. "Immigration-Dependent Extensive Growth in Small Island Tourism Economies: The Cases of Aruba and Sint Maarten." *International Development Planning Review* 38 (1): 75-93.

Chapter 3:

Alberts, A. and G. Baldacchino. 2017. "Resilience and Tourism in Islands: Insights from the Caribbean." In *Tourism and Resilience*, edited by Richard W. Butler, 150-162. Wallingford, UK: CAB International.

First author: A. Alberts. All field work conducted by A. Alberts, as well as overall authorship. Authors jointly developed points of departure and held joint editorial responsibility. Important initial ideas, conceptual and theoretical framework contributions as well as editorial input by G. Baldacchino.

Chapter 4:

Alberts, A. "Governance of Island Carrying Capacity and Vulnerability through the Stages of the Tourism Area Lifecycle." *Submitted for Publication.*

Chapter 5:

Alberts, A. " Labor market segmentation and the 'mandatory growth' paradox: why Small Island Tourism Economies grow beyond their carrying capacity limits." *Submitted for Publication.*

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Alberts, A. 2020a. "Governance of Island Carrying Capacity and Vulnerability through the Stages of the Tourism Area Lifecycle." *Submitted for Publication*: 1-15.

———. 2016. "Immigration-Dependent Extensive Growth in Small Island Tourism Economies: The Cases of Aruba and Sint Maarten." *International Development Planning Review* 38 (1): 75-93.

———. 2020b. "Labor Market Segmentation and the Mandatory Growth Paradox: Why Small Island Tourism Economies Grow Beyond their Carrying Capacity Limits." *Submitted for Publication*: 1-22.

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Baldacchino, Godfrey, Vincent Cassar, and Joseph G. Azzopardi, eds. 2019. *Malta and its Human Resources: Management and Development Perspectives*: Msida: Malta University Press.

Baldacchino, Godfrey and David Milne, eds. 2000. *Lessons from the Political Economy of Small Islands. the Resourcefulness of Jurisdiction*. London, UK; Charlottetown, Canada: MacMillan Press Limited; Institute of Island Studies.

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Baldacchino, Godfrey and Geoffrey Bertram. 2009. "The Beak of the Finch: Insights into the Economic Development of Small Economies." *The Round Table* 98 (401): 141-160.

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Summary

Aruba and Sint Maarten are two constituent countries of the Kingdom of the Netherlands, located at opposite ends of the Caribbean basin. Since the 1960s, Aruba and Sint Maarten developed along similar paths into "Small Island Tourism Economies" (SITEs) and have belonged to the group of most intensely tourism-dedicated island economies in the world for the past 30 years. The SITE theory poses that these islands develop along the lines of Butler's Tourism Area Life Cycle (TALC) model.

This study answers the question whether the evolutionary trajectory of both islands indeed matches the stages of the TALC, but more importantly addresses the issue of *how* this happened, taking a governance and socio-economic perspective. Both islands are presently considered to have arrived at the *stagnation* phase of the TALC. This implies they have reached the limits of their *carrying capacity*, the level of tourism activity that an area can accommodate without adverse effect on the environment, the resident community or the quality of the tourism product itself. Exceeding the carrying capacity limits means the SITE model is no longer sustainable. Studies of SITEs are usually limited to high-level observations of tourism numbers and other macro indicators or focused on the marketing and factors determining demand for of the destination's product.

The internal governance and socio-economic dynamics of SITEs are far less often the object of research. Questions as to what internal factors promote, discourage or shape SITE development are complex. What makes SITEs tick? What are the internal governance and socio-economic processes that help understand how SITEs develop into destinations with a high tourism intensity, and why they react the way they do, when – being small islands - inevitably the limits of their carrying capacity are reached?

Therefore, the central question of this thesis is:

> *How have governance and socio-economic factors contributed to the current unsustainable state of the SITE development model and its resistance to change in Aruba and St. Maarten? How can inclusion of these factors improve the descriptive and explanatory power of the SITE framework?*

SITEs are confronted with a multi-dimensional problem. The tourism product itself has become dated and weary, leading to less repeat visitors and more challenging competition. Secondly, the volume and scale of tourism has grown tremendously, filling practically all readily available locations. This is part of the now globally recognized phenomenon of over-tourism. A third factor is population pressure. To supply the workforce for their rapidly growing tourism industry, SITE

populations have grown proportionally - mainly through immigration. Housing, education, health care, infrastructure and other public services have fallen behind as the SITE development progressed, while the large immigration numbers put a strain on social cohesion in previously tight-knit island communities. These factors in turn all contributed to environmental degradation, which then fed back negatively into the tourism product and quality of life on the islands. As a fifth dimension, economic productivity has not increased for at least two decades. Worse still, during the growth stages productivity numbers have been flattered by the addition of immigrant workers to the active population, a situation that is now reversing, causing rapid ageing of the population.

Surprisingly, while governments and civil society in SITEs clearly became aware of the problems they were in earlier on, this has not led to a revision of the SITE model, or even to a halt to growth. Already in the stagnation phase, SITE economies keep expanding by volume. As the different issues outlined above start to have cumulative effects , a slide into a *decline* stage of the TALC model looms, which in effect would mean a collapse of the SITE concept. The reason for this apparent contradiction between acknowledgement and action must lie in the dynamics of the SITE model itself. It is therefore particularly important to analyze the socio-economic dynamics and governance 'inner workings' of the SITE model to arrive at an explanation.

Firstly, the main socio-economic characteristics of the – mature - SITE model are analyzed. Fast growth brought the SITEs to an exceedingly high level of tourism intensity, measured by the *Tourism Penetration Index*, the main benchmark of the SITE model. This meant the islands needed large numbers of immigrant workers to supplement the limited local labor force. During the growth phases, volume and productivity at first advanced in tandem. On reaching the mature phases of the TALC trajectory however, productivity stagnated with real GDP and population increasing in equal measure, resulting in decades of *extensive growth*. The movement from neighboring low-income surrounding countries and islands to SITEs matched earlier patterns of migration in the Caribbean region, where islands are alternately supplier or receiver of regional labor, as industries develop and dwindle per island. For this reason, conceptually 'SITE' cannot be interpreted as an island development model only; it is a regional development concept as well. Compounding the structural socio-economic problems, the large numbers of immigrant workers the SITEs attracted during their growth phases at first created a macro-economic windfall by increasing participation and productivity numbers as well as tax revenues, combined with low dependency ratios and low health, education and other government expenses. This positive effect has now reversed into a demographic timebomb; while economic growth is slowing down and productivity growth is zero, the same population cohorts that made fast growth

possible are now nearing retirement in a process of accelerated ageing of the population.

The second dimension of the SITE model, equally contributing to the perceived success of both islands, is the relatively *low vulnerability and high resilience* of their economy and society. At a macro level the common wisdom that diversification promotes resilience does not seem to apply to SITEs. Instead, intelligent and flexible dedicated specialization in one sector, or *speciation,* seems to lead to favorable results. External shocks have a relatively mild impact, although in the mature stages of the TALC vulnerability does increase. At a micro level, additional resilience-promoting mechanisms are at work in the labor market. Workers combine different jobs, move from informal to formal sectors and between branches of industry with the changes in labor market demand, resembling the phenomenon of *occupational multiplicity* described in earlier Caribbean research. Furthermore, circular migration adds to resilience at micro- and macro levels. In the wake of sudden economic downturns immigrants return to their home country, either spontaneously or promoted by government, cushioning the impact of large shocks.

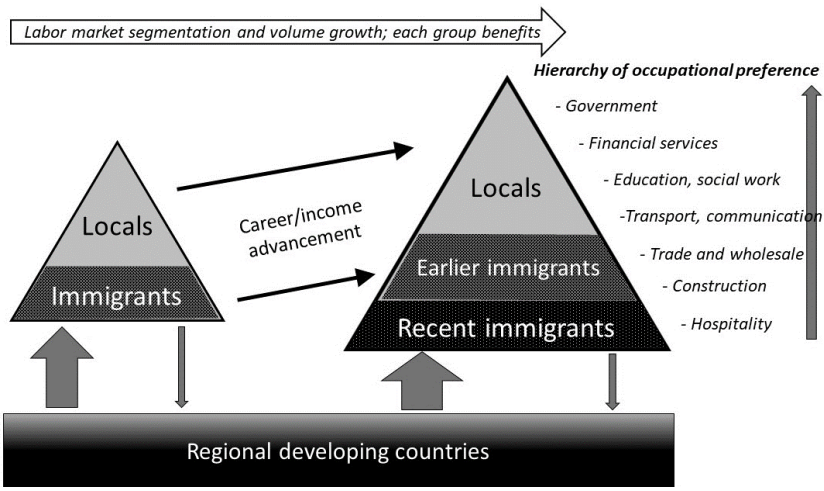
The question to what extent *the governance framework* of the SITEs contributed to the SITE development is the third issue addressed in this thesis. The horizontal governance dimension, between government, private sector and civil society, as well as the vertical dimension, comprising the three levels of the Kingdom of the Netherlands, are investigated. The weak horizontal governance structure with a dedicated 'laissez faire' approach, was conducive to SITE development in the growth stages, as it promoted the investment climate. A tipping point was reached in the mature stages of the TALC, when the lack of governance capacity made the requirements of the growing economy and population unmanageable, while at the same time the limits of carrying capacity were reached. In the vertical dimension, being a constituent jurisdiction of the Kingdom initially promoted SITE development as well, but the same tipping point was reached when the governance problems in the mature SITE stages caused friction between islands and Kingdom. The divergent development of the two SITEs compared to the other four Dutch islands in the Caribbean contributed greatly to the gradual dissolution of the Netherlands Antilles constitutional structure.

The combination of socio-economic characteristics, such as continuing extensive growth, resilience generated by circular migration or by individual labor market strategies and weak governance capacity in the face of carrying capacity limits lead up to the fourth question; why SITE economies keep growing while the lack of productivity gain and the limits of carrying capacity are acknowledged, a situation postulated here as the *mandatory growth paradox*.

The answer to this paradox can be found in an analysis of the labor market using the concept of *labor market segmentation*. While the average productivity and real income levels have not increased for many years, the growing SITE model still seems to give most segments of the labor market opportunities for advancement. This is possible because at the base of the labor market pyramid, immigrants are continuously added in newly created jobs in the growing tourism industry or construction. Earlier immigrant cohorts move upwards in the same sector or into preferred industries such as trade or transport, while locals by and large move into education or into the financial sector or government. This way, all existing participants in the labor market have opportunities for advancement, while the new immigrants, coming from low-income countries in the region, also improve their personal situation. However, this model will only work as long as the economy, and the labor market with it, continues to expand. This makes for a model of *'mandatory growth'*, causing continuous tourism volume expansion in the SITEs, in spite of the acknowledged carrying capacity limitations.

The innovative contribution to the academic debate in this thesis is its focus on the role of governance and socio-economic dynamics within SITEs themselves as factors explaining the development trajectories which the islands follow. While this gives a better understanding why SITEs persist on a trajectory that may lead to the islands slipping into the decline phase of the lifecycle and the collapse of the model, the question remains what SITEs might do to stave off this fate.

Labor market segmentation explains the 'mandatory growth' paradox



It is clear that any trajectory that would avoid a decline would require a strong governance framework to steer the SITE model in a new direction, coordinated

horizontally between government, private sector and civil society and vertically between the SITEs and the Kingdom. Even a middle of the road scenario in which the current stagnation phase would be drawn out, while perhaps countering the worst effects of exceeding the carrying capacity, would be problematic, as the pressure to continue the 'mandatory growth' mechanism would remain high. Furthermore, in any scenario the effects of the rapidly ageing population on the government budget and social security funds would have to be confronted. Therefore, simply trying to extend the status quo is not a viable option. Optimally, SITEs could aim for a TALC *rejuvenation* trajectory, in which the tourism industry would have to be radically reinvented in quality and quantity. In such a scenario, first of all the limits of an island's carrying capacity would have to be sustainably respected, which in all likelihood would also mean that further growth would have to come from increased value added and productivity gains rather than from an ever greater volume.

Samenvatting

Aruba en Sint Maarten zijn twee landen binnen het Koninkrijk der Nederlanden, gelegen aan weerszijden van het Caribisch bekken. Sinds 1960 ontwikkelden Aruba en Sint Maarten zich langs dezelfde lijnen tot "Small Island Tourism Economies" (SITE's) en behoren sinds dertig jaar tot de meest intensief toerisme-georiënteerde eilandeconomieën ter wereld. De theorie rondom SITE's stelt dat deze eilanden zich ontwikkelen volgens het stramien van Butler's Tourism Area Life Cycle (TALC).

Deze studie beantwoordt de vraag of het ontwikkelingstraject van beide eilanden inderdaad verloopt volgens de stadia van de TALC, maar richt zich vooral op de vraag af *hoe* dit gebeurde, vanuit *governance* (bestuurlijk) en sociaal-economisch perspectief. Beide eilanden bevinden zich nu in de *stagnatie* fase van de TALC. Dit betekent dat zij de grenzen bereikt hebben van hun *carrying capacity,* dit is het niveau van toerisme dat een gebied aan kan zonder dat dit negatieve gevolgen heeft voor het milieu, de plaatselijke bevolking of de kwaliteit van het toerismeproduct zelf. Als de grenzen van de *carrying capacity* worden overschreden betekent dit dat het SITE-model niet langer duurzaam is. Onderzoek naar SITE's beperkt zich meestal tot algemene beschouwingen gebaseerd op toerismecijfers en andere macro-indicatoren, of het richt zich op de marketing van die bestemming en op factoren die de vraag naar het toerismeproduct bepalen.

De interne bestuurlijke en sociaal-economische dynamiek van SITE's is niet vaak het onderzoeksobject. Vragen met betrekking tot de interne factoren die de SITE-ontwikkeling bevorderen, remmen of vormgeven zijn complex. Wat beweegt de SITE's? Welke interne bestuurlijke en sociaal-economische processen helpen ons begrijpen hoe SITE's zich ontwikkelen tot bestemmingen met een hoge toerisme-intensiteit, en hoe zij reageren wanneer ze – het zijn tenslotte eilanden – onvermijdelijk de grenzen van hun *carrying capacity* bereiken?

De centrale vraag van dit proefschrift is daarom:

> *Hoe droegen bestuurlijke en sociaal-economische factoren bij aan de huidige niet-duurzame staat van het SITE ontwikkelingsmodel en aan de weerstand tegen verandering in Aruba en Sint Maarten? Hoe kan het in acht nemen van deze factoren de beschrijvende en verklarende kracht van het SITE-concept vergroten?*

SITE's worden geconfronteerd met een multi-dimensionaal probleem. Het toerismeproduct zelf raakt verouderd en sleets, wat leidt tot een daling van het aantal herhalingsbezoeken en een zwakkere concurrentiepositie. Ten tweede is de toeristenindustrie uit zijn krachten gegroeid en vult nu praktisch alle bruikbare

locaties. Dit past in het nu wereldwijd onderkende probleem van overtoerisme. Een derde factor is overbevolking. Om te voorzien in de nodige menskracht voor de toeristenindustrie is de bevolking van de SITE's navenant gegroeid – vooral door immigratie. Huisvesting, onderwijs, gezondheidszorg en infrastructuur zijn echter achtergebleven terwijl de SITE ontwikkeling voortschreed, en de grote aantallen immigranten zetten de sociale samenhang in de tot dan toe hechte eilandgemeenschappen onder druk. Al deze factoren droegen op hun beurt bij tot schade aan het milieu wat vervolgens weer zijn weerslag had op het toerismeproduct en de kwaliteit van het leven op de eilanden.

Als vijfde factor is de economische productiviteit al meer dan twee decennia niet gestegen. Erger nog, de productiviteitscijfers tijdens de groeifasen werden geflatteerd door het steeds toevoegen van immigranten aan de actieve beroepsbevolking, een situatie die zich omkeert nu de bevolking in hoog tempo vergrijst.

Hoewel overheden en het maatschappelijke middenveld in de SITE's zich op tijd bewust werden van de problemen die zich aandienden, gingen ze niet over tot hervorming van het SITE-model of zelfs maar tot het afremmen van de groei. Hoewel ze zich al in de *stagnatie* fase bevinden, blijven de SITE economieën groeien in omvang. Omdat de bovengenoemde problemen elkaar versterken, dreigen ze af te glijden naar een *decline* (neergangs-)fase van het TALC model, wat neer zou komen op een ineenstorting van het SITE concept. De achtergrond van deze schijnbare tegenstelling tussen onderkenning van de problemen en gebrek aan handelen moet gezocht worden in de dynamiek van het SITE-model zelf. Het is daarom van uitzonderlijk belang het sociaal-economische en bestuurlijke 'raderwerk' van het SITE-model te onderzoeken om een verklaring te vinden.

In de eerste plaats worden de sociaal-economische eigenschappen van het – volwassen – SITE-model geanalyseerd. Door snelle groei kwamen de SITE's op een steeds hoger niveau van toerisme-intensiteit, wat wordt gemeten met de *Tourism Penetration Index*, het belangrijkste kengetal van het SITE-model. Dit betekende dat de eilanden grote aantallen buitenlandse werknemers nodig hadden om de beperkte lokale beroepsbevolking aan te vullen. Tijdens de groeifasen gingen volume- en productiviteitsgroei eerst hand in hand. Toen de volwassenheidsfasen van het TALC ontwikkelingstraject werden bereikt, stagneerde de productiviteit echter omdat het reële Bruto Binnenlands Product (BBP) en de bevolking even snel groeiden, wat resulteerde in *extensieve groei*. De beweging van armere buurlanden en eilanden naar de SITE's komt overeen met bekende migratiepatronen in de Caribische regio, waarbij eilanden afwisselend regionale leverancier en afnemer van arbeid zijn, al naar gelang industrieën op deze eilanden groeien of krimpen. Dit is een reden waarom 'SITE' conceptueel niet kan worden gezien als alleen een eiland-ontwikkelingsmodel; het is ook een regionaal ontwikkelingsconcept.

De structurele sociaal-economische problemen worden nog verergerd doordat de grote aantallen geïmmigreerde werknemers gedurende de groeifasen eerst de macro-economische indicatoren flatteerden door een hoge participatiegraad, productiviteit en belastinginkomsten te veroorzaken, gecombineerd met een lage afhankelijkheidsgraad en lage gezondheidszorg-, onderwijs- en andere overheidsuitgaven. Dit positieve effect slaat nu om in een demografische tijdbom; terwijl de economische groei vertraagt en de productiviteitsgroei tot nul is gedaald, naderen de bevolkingscohorten die de snelle groei mogelijk hebben gemaakt nu de pensioenleeftijd in een proces van versnelde vergrijzing.

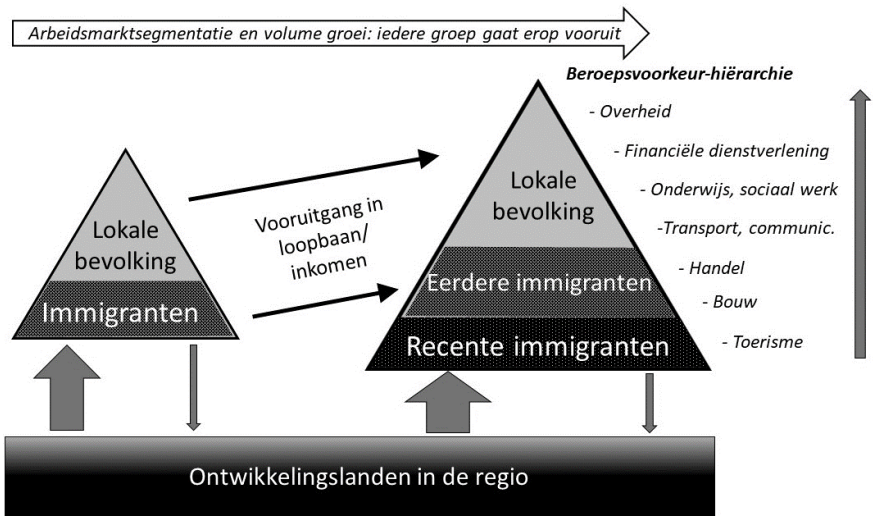
Een tweede vraag omtrent het SITE-model gaat over de relatief *lage kwetsbaarheid en hoge veerkracht* van hun economie en samenleving die eveneens in hoge mate bijdraagt aan het schijnbare succes van beide eilanden. De analytische aanname dat diversificatie de economische veerkracht verhoogt, is op macroniveau blijkbaar niet van toepassing op SITE's. In tegendeel, intelligente en flexibele doelgerichte concentratie op één industrietak, *speciation* (soortvorming, speciatie) genoemd, leidt blijkbaar ook tot gunstige resultaten. Externe schokken hebben een relatief mild effect, hoewel het niveau van kwetsbaarheid wel stijgt tijdens de volwassenheidsfasen van de TALC. Op microniveau zijn aanvullende arbeidsmarktmechanismen werkzaam die de veerkracht bevorderen. Werkenden combineren verschillende banen, bewegen heen en weer tussen de formele en de informele sector van de economie en tussen bedrijfstakken, al naar gelang de vraag naar arbeid, een fenomeen dat lijkt op wat in eerder Caribisch onderzoek is omschreven als *occupational multiplicity* (meervoudige beroepsuitoefening). Bovendien bevordert circulaire migratie de veerkracht op micro- en macroniveau. Na een plotselinge economische teruggang keren immigranten terug naar hun land van herkomst, spontaan of aangemoedigd door de overheid, wat de gevolgen van grote schokken dempt.

De derde vraag die in dit proefschrift aan de orde komt, is in hoeverre het *governance framework* (bestuursstructuur) van de SITE's heeft bijgedragen aan de SITE ontwikkeling. De dimensie van horizontale bestuursnetwerken, tussen overheid, private sector en het maatschappelijk middenveld, zowel als de verticale dimensie, die de drie bestuursniveaus van het Koninkrijk omvat, worden hier onderzocht. De zwakke horizontale bestuurlijke structuur kende een gerichte 'laissez-faire' benadering, wat het investeringsklimaat stimuleerde en zo de ontwikkeling van de SITE's in de groeifasen bevorderde. In de volwassenheidsfasen van de TALC werd een omslagpunt bereikt toen het gebrek aan bestuurskracht de vereisten van een groeiende economie en bevolking onbeheersbaar maakte, terwijl tegelijkertijd de grenzen van de *carrying capacity* werden bereikt. In het verticale vlak was het behoren tot het Koninkrijk in eerste instantie ook gunstig voor de SITE-ontwikkeling, tot eenzelfde omslagpunt werd bereikt toen de bestuurlijke problemen in de volwassen SITE's wrijving begonnen

te veroorzaken tussen de eilanden en het Koninkrijk. De divergente ontwikkeling van de twee SITE's vergeleken met de andere vier Nederlandse eilanden in het Caribisch gebied droeg in belangrijke mate bij aan het geleidelijk uiteenvallen van de Nederlandse Antillen als bestuurlijke eenheid.

De combinatie van sociaal-economische eigenschappen zoals voortdurende extensieve groei, veerkracht veroorzaakt door circulaire migratie of door individuele arbeidsmarktstrategieën, en een zwakke bestuurskracht tegenover de grenzen van de *carrying capacity*, leidt naar de vierde vraag; waarom blijven SITE's groeien terwijl het gebrek aan productiviteitsgroei en de grenzen aan de *carrying capacity* wel worden onderkend, een situatie hier naar voren gebracht onder de naam *mandatory growth paradox* (verplichte groei-paradox).

Arbeidsmarktsegmentatie verklaart de 'verplichte groei'- paradox



De oplossing voor deze paradox kan worden gevonden door een analyse van de arbeidsmarkt met behulp van het concept *arbeidsmarktsegmentatie*. Terwijl de gemiddelde arbeidsproductiviteit- en inkomensniveaus al jaren niet zijn gestegen, biedt het groeiende SITE-model de meeste segmenten van de arbeidsmarkt toch mogelijkheden tot vooruitgang. Dit wordt mogelijk gemaakt door steeds aan de basis van de arbeidsmarktpyramide migranten toe te voegen in nieuw gecreëerde banen in de groeiende toeristenindustrie of in de bouw. Eerdere immigratiecohorten bewegen omhoog in dezelfde sector of naar voorkeurssectoren zoals handel en vervoer, terwijl de lokale bevolking grosso modo in de richting trekt van onderwijs, de financiële sector en de overheid. Op deze manier gaan alle bestaande deelnemers aan de arbeidsmarkt er op vooruit,

terwijl ook de nieuwe immigranten, afkomstig uit armere landen in de regio, zo hun lot verbeteren. Dit model werkt echter alleen zo lang de economie, en daarmee de arbeidsmarkt, blijft groeien. Dit maakt het een *mandatory growth* model, dat voortdurende volumegroei van de SITE-toeristenindustrie veroorzaakt, ondanks het feit dat de grenzen van de *carrying capacity* onder ogen worden gezien.

De vernieuwende bijdrage die dit proefschrift aan het academische debat levert, is gelegen in de focus op de rol van bestuurlijke en sociaal-economische dynamiek als verklarende factoren voor het ontwikkelingstraject dat de eilanden hebben gevolgd. Hoewel dit helpt te begrijpen waarom de SITE's doorgaan op een weg die zou kunnen leiden tot de neergangsfase van de toerisme-levenscyclus en de ineenstorting van hun model, werpt dit ook de vraag op wat de SITE's kunnen doen om dit lot te vermijden.

Het is duidelijk dat een sterk bestuurskader een noodzakelijke voorwaarde is voor ieder traject dat een neergang zou kunnen vermijden, met horizontale coördinatie tussen overheid, bedrijfsleven en het maatschappelijk middenveld, en verticaal tussen de SITE's en het Koninkrijk. Zelfs een gulden middenweg-scenario, waarin de huidige stagnatiefase wordt opgerekt, eventueel met maatregelen tegen de ergste uitwassen van het overschrijden van de *carrying capacity*, is problematisch omdat de druk zal blijven bestaan om de *verplichte groei* voort te zetten. Bovendien zullen in elk scenario de gevolgen van de snelle vergrijzing op de overheidsfinanciën en de sociale fondsen moeten worden aangepakt. Simpelweg proberen de status quo voort te zetten is dus geen reële optie. In het meest optimistische geval zouden de SITE's kunnen mikken op wat in de TALC-theorie een *rejuvenation* (verjongings) traject wordt genoemd, wat betekent dat de toeristenindustrie kwalitatief en kwantitatief op een geheel nieuwe leest wordt geschoeid. In zo'n scenario moeten in de eerste plaats de grenzen van de eilandelijke *carrying capacity* duurzaam worden gerespecteerd, wat waarschijnlijk ook zal betekenen dat verdere groei moet komen uit hogere toegevoegde waarde en productiviteit in plaats van uit voortdurende toename van het volume.